

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comm nts
1	BRS	L1	0	424.ccls.	USPAT	2003/03/07 13:40	
2	BRS	L2	62660	424/\$.ccls.	USPAT	2003/03/07 13:41	
3	BRS	L3	13444	534/\$.ccls.	USPAT	2003/03/07 13:41	
4	BRS	L4	75410	l2 or l3	USPAT	2003/03/07 14:50	
5	BRS	L5	5686	l4 and (chelate? or ligand?)	USPAT	2003/03/07 13:41	
6	BRS	L6	4543	l5 and (dota? or substituted(w)dota?)	USPAT	2003/03/07 13:42	
7	BRS	L7	2796	l6 and (peptide? or polypeptid?)	USPAT	2003/03/07 13:42	
8	BRS	L8	969	l7 and proteas?	USPAT	2003/03/07 13:42	
9	BRS	L9	422	l8 and linker?	USPAT	2003/03/07 13:43	
10	BRS	L10	408	l9 and (mri or magnetic(w)resonance? or nmr or nuclear(w)magnetic?)	USPAT	2003/03/07 13:43	
11	BRS	L11	30	l10 and (gadolinium? or Gd?)	USPAT	2003/03/07 14:17	
12	BRS	L12	247	l10 and (metal or metals)	USPAT	2003/03/07 14:17	
13	BRS	L13	9	l11 not l12	USPAT	2003/03/07 14:18	
14	BRS	L14	226	l12 not l11	USPAT	2003/03/07 14:23	
15	BRS	L15	1	"6348185"	USPAT	2003/03/07 14:30	
16	BRS	L16	48	l4 and (dota.ti,ab,clm.)	USPAT	2003/03/07 14:51	

	Error Definition	Err rs
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	U	1	PT	P	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval Classif
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6409990 B1	20020625	24	Macromolecular carrier for drug and diagnostic agent delivery	424/9.35	424/9.1; 424/9.3; 424/9.351; 424/9.4; 424/9.43; 514/54; 514/58	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6359119 B1	20020319	6	Formulation of Tc and Re carbonyl complexes using stannous ion as the reductant for pertechnetate and perrhenate	534/14	435/372; 435/7.24; 435/7.25; 530/402; 530/811; 556/46	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6348185 B1	20020219	37	Membrane-permeant peptide complexes for medical imaging, diagnostics, and pharmaceutical therapy	424/1.69	424/1.11; 424/1.65; 424/9.1; 534/10; 534/14	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6312661 B1	20011106	15	Method for the detection and localization of ductal exocrine pancreas tumours	424/1.69	424/1.41; 424/9.34; 424/9.341	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6296831 B1	20011002	13	Stimulus sensitive gel with radioisotope and methods of making	424/1.29	424/1.11; 424/1.37	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6287536 B1	20010911	73	Two-step pretargeting methods using improved biotin-active agent conjugates	424/1.49	424/1.53; 424/1.65; 424/1.73; 424/1.77; 424/179.1	
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6274713 B1	20010814	13	Polychelants	530/402	424/9.3; 530/345; 530/391.5	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6241968 B1	20010605	12	Compositions for increasing the MRI contrast in visualizing the digestive tract of patients	424/9.363	514/184; 514/836; 534/16; 540/465; 540/474	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6217849 B1	20010417	12	Liposome suspensions as blood pool imaging contrast agents	424/9.321	424/9.36; 424/9.4; 424/9.45	

	Inventor	S	C	2	3	4	5	Image Doc. Displayed
1	Vera, David R.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6409990
2	Pipes, David W. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6359119
3	Piwnica-Worms, David	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6348185
4	Reubi, Jean-Claude	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6312661
5	Weller, Richard E. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6296831
6	Reno, John M. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6287536
7	Sieving, Paul F. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6274713
8	Tournier, Herve et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6241968
9	Tournier, Herve et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6217849

	U	1	PT	P	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval Classif
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6180082 B1	20010130	46	Method to enhance tissue accumulation of radiolabeled compounds	424/1.69	424/1.11; 424/1.65; 530/300; 530/311; 530/317	
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6120768 A	20000919	10	Dota-biotin derivatives	424/178.1	424/1.41; 424/1.49; 424/1.53; 424/181.1; 424/183.1; 424/9.1; 424/9.3; 530/324; 530/325; 530/326; 530/327; 530/328; 530/329; 530/330; 530/331	
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6096290 A	20000801	12	Radionuclide labeling of vitamin B.sub.12 and coenzymes thereof	424/1.65	424/1.11; 424/1.73; 424/9.1; 514/52; 536/26.44	
13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6060040 A	20000509	12	Cross-linked polymeric compositions for increasing the MRI contrast in visualising the digestive tract of patients	424/9.364	514/836; 556/105; 556/116; 556/134; 556/148; 556/50; 556/55; 556/63; 556/77	
14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6056939 A	20000502	25	Self-assembling heteropolymetallic chelates as imaging agents and radiopharmaceuticals	424/1.65	424/1.11; 534/14	

	Inventor	S	C	2	3	4	5	Image Doc. Displayed
10	Woltering, Eugene A. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6180082
11	Griffiths, Gary L. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6120768
12	Collins, Douglas A. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6096290
13	Tournier, Herve et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6060040
14	Desreux, Jean F. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6056939

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15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6045821 A	20000404	13	Liposomal agents	424/450	424/1.21; 424/9.3; 424/9.321; 424/9.361; 424/9.42; 424/9.51	
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6022524 A	20000208	4	Process for the conjugation of chelants with molecules containing amino groups	424/1.69	424/9.36; 424/9.361; 424/9.364; 530/300; 530/303; 530/362; 530/401; 534/10; 534/14; 540/465; 562/566	
17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6004533 A	19991221	12	Radionuclide labeling of vitamin B.sub.12 and coenzymes thereof	424/1.73	424/1.11; 424/1.65; 424/9.1; 536/26.44	
18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5980862 A	19991109	38	Magnetic resonance imaging agents for the detection of physiological agents	424/9.35	424/1.11; 424/9.1; 424/9.3; 424/9.323; 534/15	
19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5958372 A	19990928	13	Low viscosity chelating polymers for diagnostic imaging	424/1.65	424/9.34; 514/182; 514/492; 514/836; 534/16; 540/465; 556/105; 556/116; 556/134; 556/148; 556/50; 556/55; 556/63; 556/77	

	Inventor	S	C	2	3	4	5	Image Doc. Displayed
15	Garrity, Martha et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6045821
16	Maisano, Federico et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6022524
17	Collins, Douglas A. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 6004533
18	Meade, Thomas et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5980862
19	Ladd, David L.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5958372

	U	1	PT	P	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval Classif
20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5955605 A	19990921	83	Biotinidase resistant biotin-DOTA conjugates	540/474	424/9.363; 536/1.11; 536/17.4; 536/53; 548/303.7; 548/304.1	
21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5914095 A	19990622	14	Polychelants containing amide bonds	424/1.65	424/9.363; 424/9.365; 514/492; 514/502; 514/836; 534/15; 534/16; 556/105; 556/116; 556/134; 556/148; 556/50; 556/55; 556/63; 556/77	
22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5900228 A	19990504	12	Bifunctional detection agents having a polymer covalently linked to an MRI agent and an optical dye	424/9.363	424/9.3; 424/9.36; 424/9.362; 424/9.364; 424/9.365; 424/9.6; 424/9.61	
23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5833948 A	19981110	15	Blood-pool imaging composition comprising micelles containing a lipophilic chelating agent and a non-ionic surfactant	424/9.321	424/9.32; 514/836; 514/937	
24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5833947 A	19981110	15	Magnetic resonance imaging	424/9.36	424/9.363; 424/9.364; 514/836	
25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5807879 A	19980915	23	Biotinidase-resistant biotinylated compound and methods of use thereof	514/387	424/1.49; 424/9.362; 424/9.363; 548/304.1	
26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5739313 A	19980414	12	Radionuclide labeling of vitamin B.sub.12 and coenzymes thereof	536/26.44	424/1.73; 536/26.4	

	Inventor	S	C	2	3	4	5	Image Doc. Displayed
20	Axworthy, Donald B. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5955605
21	Watson, Alan D	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5914095
22	Meade, Thomas J. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5900228
23	Tournier, Herve et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5833948
24	Rocklage, Scott M. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5833947
25	Rosebrough, Scott F.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5807879
26	Collins, Douglas A. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5739313

	U	1	PT	P	Document ID	Issue Date	Pag s	Title	Current OR	Current XRef	Retrieval Classif
27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5707605 A	19980113	24	Magnetic resonance imaging agents for the detection of physiological agents	424/9.35	424/9.3; 424/9.323	
28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5707604 A	19980113	100	Vivo agents comprising metal-ion chelates with acidic saccharides and glycosaminoglycans, giving improved site-selective localization, uptake mechanism, sensitivity and kinetic-spatial profiles	424/9.35	424/9.42; 424/9.5; 436/173; 514/54; 514/56; 514/836	
29	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5672334 A	19970930	75	Invivo agents comprising cationic metal chelators with acidic saccharides and glycosaminoglycans	424/9.34	424/450; 424/85.1; 424/85.2; 436/173; 436/806	
30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5660814 A	19970826	18	Iodinated paramagnetic chelates, and their use as contrast agents	424/9.36	424/9.1; 424/9.4; 424/9.42; 534/16	
31	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5649537 A	19970722	38	Paramagnetic metal ion chelates and use thereof as contrast agents in magnetic resonance imaging	424/9.3	424/9.341; 600/420	
32	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5648063 A	19970715	16	Sterile composition comprising a chelate complex for magnetic resonance imaging	424/9.363	436/173; 514/184; 514/836; 534/15; 534/16; 540/465; 540/474	
33	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5630996 A	19970520	80	Two-step pretargeting methods using improved biotin-active agent conjugates	424/1.49	424/1.53; 424/9.363; 514/387; 530/391.1; 530/391.3; 530/391.5; 540/474; 546/278.7; 546/283.1; 548/303.7; 548/304.1; 548/520; 548/526	

	Invent r	S	C	2	3	4	5	Image D c. Displayed
27	Meade, Thomas et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5707605
28	Ranney, David F.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5707604
29	Ranney, David F.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5672334
30	Uggeri, Fulvio et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5660814
31	Anelli, Pier Lucio et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5649537
32	Gries, Heinz et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5648063
33	Reno, John M. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5630996

	U	1	PT	P	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval Classif
34	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5608060 A	19970304	79	Biotinidase-resistant biotin-DOTA conjugates	540/474	424/9.363; 536/1.11; 536/17.4; 536/53; 548/304.1	
35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5578287 A	19961126	37	Three-step pretargeting methods using improved biotin-active agent	424/1.49	424/1.53; 424/9.363; 514/387; 530/391.1; 530/391.3; 530/391.5; 540/474; 548/303.7	
36	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5494655 A	19960227	16	Methods for detecting blood perfusion variations by magnetic resonance imaging	424/9.36	424/9.363; 424/9.364; 424/9.365; 436/173; 514/184; 514/492; 514/502; 514/836; 600/419; 600/420	
37	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5468467 A	19951121	11	Methods for the in vivo measurement of the concentration of non-imaging nmr-detectable xenobiotic compounds	424/9.361	424/9.363; 424/9.364; 436/173; 514/492; 514/502; 514/836; 600/420	
38	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5364613 A	19941115	16	Polychelants containing macrocyclic chelant moieties	424/9.3	424/9.34; 514/2; 530/363; 530/391.1; 530/391.5; 534/12; 534/13; 534/14; 534/15; 534/16	

	Inventor	S	C	2	3	4	5	Image Doc. Displayed
34	Axworthy, Donald B. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5608060
35	Theodore, Louis J. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5578287
36	Rocklage, Scott M. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5494655
37	Tweedle, Michael F. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5468467
38	Sieving, Paul F. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5364613

	U	1	PT	P	Document ID	Issue Date	Pages	Title	Current OR	Current XR f	Retrieval Classif
39	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5273743 A	19931228	20	Trifunctional antibody-like compounds as a combined diagnostic and therapeutic agent	424/136.1	424/1.53; 424/138.1; 424/143.1; 424/144.1; 424/152.1; 424/156.1; 435/972; 436/819; 530/387.3; 530/388.2; 530/388.85; 530/388.9; 530/389.7; 530/389.8; 530/391.1; 530/391.3; 530/391.5; 530/391.7; 530/391.9	
40	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5240693 A	19930831	12	Image enhancement by coadministration of biomodulators and structurally modified imaging agents	424/1.69	424/1.65; 424/1.73; 424/9.35; 424/9.364; 424/9.4; 514/23; 548/453; 600/420; 600/431	
41	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5208324 A	19930504	9	Paramagnetic compounds	424/9.35	436/173; 530/391.5; 534/15; 534/16; 536/101; 536/112; 536/113; 536/121; 536/17.1; 536/51	

	Inventor	S	C	2	3	4	5	Image Doc. Displayed
39	Ahlem, Clarence et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5273743
40	Born, Jerry L. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5240693
41	Klaveness, Jo et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5208324

	U	1	PT	P	Document ID	Issue Dat	Pages	Titl	Current OR	Current XRef	Retrieval Classif
42	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5190744 A	19930302	8	Methods for detecting blood perfusion variations by magnetic resonance imaging	424/9.34	324/306; 324/309; 424/9.35; 424/9.363; 424/9.364; 424/9.365; 436/173; 514/184; 514/492; 514/836; 600/419; 600/420	
43	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5138039 A	19920811	12	Chelating compounds and their use	534/14	534/10	
44	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4933441 A	19900612	3	Contrast enhancing agents for magnetic resonance images	534/16	424/9.35; 436/173; 436/806; 536/112	
45	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4877600 A	19891031	3	Lysine salt of the gadolinium-dota complex and its diagnostic applications	424/9.363	424/9.42; 514/184; 534/15	
46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4822594 A	19890418	5	Contrast enhancing agents for magnetic resonance images	424/9.35	436/173; 436/806; 534/15; 534/16; 536/112	
47	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4678667 A	19870707	11	Macrocyclic bifunctional chelating agents	424/1.53	424/1.69; 424/179.1; 424/9.34; 424/9.341; 424/9.363; 540/465	
48	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4639365 A	19870127	4	Gadolinium chelates as NMR contrast agents	424/9.363	436/173; 436/806; 534/15; 534/16	

	Inventor	S	C	2	3	4	5	Image D c. Displayed
42	Rocklage, Scott M. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5190744
43	Seri, Shigemi et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 5138039
44	Gibby, Wendell A.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4933441
45	Bonnemain, Bruno et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4877600
46	Gibby, Wendell A.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4822594
47	Meares, Claude F. et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4678667
48	Sherry, A. Dean	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 4639365

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1208DXJ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS	4	Apr 09	ZDB will be removed from STN
NEWS	5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS	6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS	7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS	8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS	9	Jun 03	New e-mail delivery for search results now available
NEWS	10	Jun 10	MEDLINE Reload
NEWS	11	Jun 10	PCTFULL has been reloaded
NEWS	12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS	13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS	14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS	15	Jul 30	NETFIRST to be removed from STN
NEWS	16	Aug 08	CANCERLIT reload
NEWS	17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	18	Aug 08	NTIS has been reloaded and enhanced
NEWS	19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS	21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS	22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	23	Sep 03	JAPIO has been reloaded and enhanced
NEWS	24	Sep 16	Experimental properties added to the REGISTRY file
NEWS	25	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	26	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	27	Oct 21	EVENTLINE has been reloaded
NEWS	28	Oct 24	BEILSTEIN adds new search fields
NEWS	29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS	31	Nov 18	DKILIT has been renamed APOLLIT
NEWS	32	Nov 25	More calculated properties added to REGISTRY
NEWS	33	Dec 02	TIBKAT will be removed from STN
NEWS	34	Dec 04	CSA files on STN
NEWS	35	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	36	Dec 17	TOXCENTER enhanced with additional content
NEWS	37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	38	Dec 30	ISMEC no longer available
NEWS	39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS	40	Jan 21	NUTRACEUT offering one free connect hour in February 2003
NEWS	41	Jan 21	PHARMAML offering one free connect hour in February 2003
NEWS	42	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	43	Feb 13	CANCERLIT is no longer being updated
NEWS	44	Feb 24	METADEX enhancements
NEWS	45	Feb 24	PCTGEN now available on STN
NEWS	46	Feb 24	TEMA now available on STN
NEWS	47	Feb 26	NTIS now allows simultaneous left and right truncation

NEWS 48 Feb 26 PCTFULL now contains images
NEWS 49 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 13:20:09 ON 07 MAR 2003

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 13:20:19 ON 07 MAR 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 MAR 2003 HIGHEST RN 497140-34-8

DICTIONARY FILE UPDATES: 6 MAR 2003 HIGHEST RN 497140-34-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=>

Uploading C:\STNEXP4\QUERIES\405046.str

<C

09/405,046

Page 3

L1 STRUCTURE UPLOADED

=> que L1

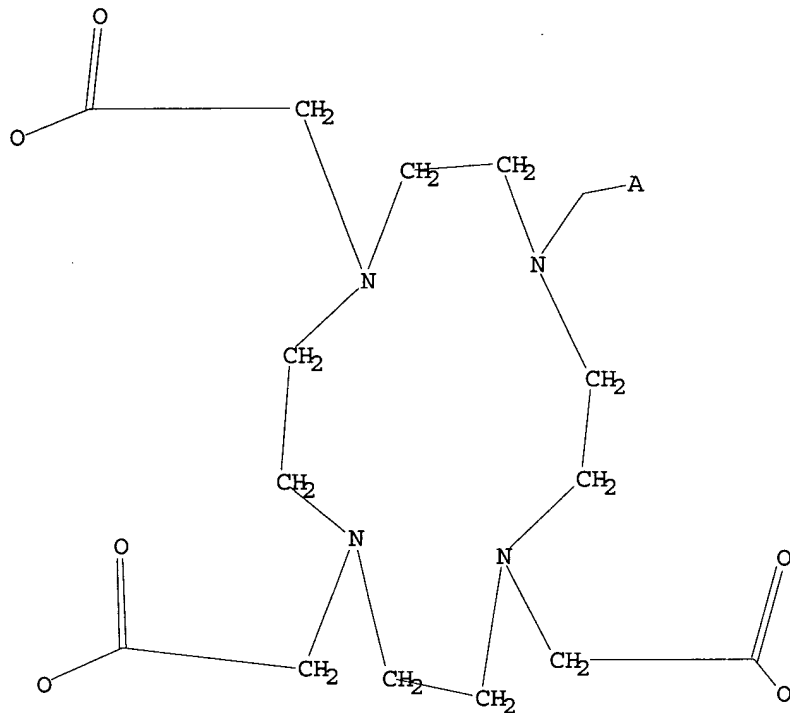
L2 QUE L1

=>

=> d

L2 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

L2 QUE ABB=ON PLU=ON L1

=> s 12

SAMPLE SEARCH INITIATED 13:20:44 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 127 TO ITERATE

100.0% PROCESSED 127 ITERATIONS

44 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 1864 TO 3216

PROJECTED ANSWERS: 483 TO 1277

L3 44 SEA SSS SAM L1

=> s 12 full

FULL SEARCH INITIATED 13:20:50 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2366 TO ITERATE

100.0% PROCESSED 2366 ITERATIONS

1005 ANSWERS

SEARCH TIME: 00.00.01

L4 1005 SEA SSS FUL L1

=> e dota/cn

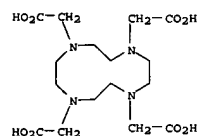
E1	1	DOSULFIN/CN
E2	1	DOT1-LIKE PROTEIN (HUMAN GENE DOT1L)/CN
E3	1	--> DOTA/CN
E4	1	DOTA TRI(TERT-BUTYL) ESTER/CN
E5	1	DOTAN/CN
E6	1	DOTAP/CN
E7	1	DOTAP CHLORIDE/CN
E8	1	DOTAREM/CN
E9	1	DOTARIZINE/CN
E10	1	DOTATOC/CN
E11	1	DOTB/CN
E12	1	DOTBZP/CN

=> s e3

L5 1 DOTA/CN

=> d

LS ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 60239-18-1 REGISTRY
CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,4,7,10-Tetraazacyclododecane-N,N',N'',N'''-tetraacetic acid
CN DOTA
FS 3D CONCORD
DR 105416-43-1
MF C16 H28 N4 O8
CI COM
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CEN, CHEMCATS, CIN, CSChem, EMBASE, Gmelin*, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

330 REFERENCES IN FILE CA (1962 TO DATE)
201 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
335 REFERENCES IN FILE CAPLUS (1962 TO DATE)

<C

09/405,046

Page 6

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2040

L6 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\405046.str

L7 STRUCTURE UPLOADED

=> que L7 AND L6

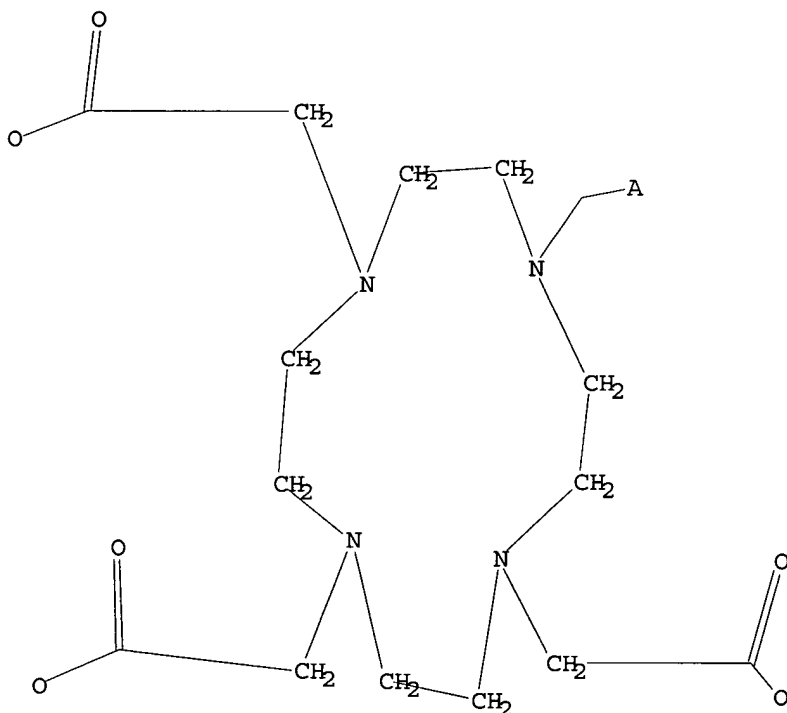
L8 QUE L7 AND L6

=> d

L8 HAS NO ANSWERS

L6 SCR 2040

L7 STR



Structure attributes must be viewed using STN Express query preparation.

L8 QUE ABB=ON PLU=ON L7 AND L6

=> s 18

SAMPLE SEARCH INITIATED 13:22:00 FILE 'REGISTRY'

<C

09/405,046

Page 7

SAMPLE SCREEN SEARCH COMPLETED - 18 TO ITERATE

100.0% PROCESSED 18 ITERATIONS
SEARCH TIME: 00.00.01

2 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 106 TO 614
PROJECTED ANSWERS: 2 TO 124

L9 2 SEA SSS SAM L7 AND L6

=> s l8 full

FULL SEARCH INITIATED 13:22:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 270 TO ITERATE

100.0% PROCESSED 270 ITERATIONS
SEARCH TIME: 00.00.02

38 ANSWERS

L10 38 SEA SSS FUL L7 AND L6

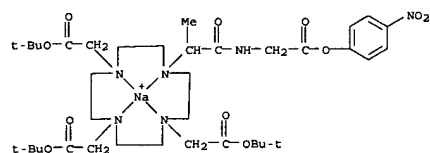
=> d scan

<C

09/405,046

Page 8

L10 38 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Sodium(1+), [tris(1,1-dimethylethyl)
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-
oxoethylamino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-
(9CI)
MP C37 H60 N6 Na O11 . Br
CI CCS, COM



● Br⁻

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

<C

09/405,046

Page 9

=> fil .search

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

303.00

303.21

FILE 'MEDLINE' ENTERED AT 13:22:33 ON 07 MAR 2003

FILE 'CAPLUS' ENTERED AT 13:22:33 ON 07 MAR 2003

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FILE 'BIOSIS' ENTERED AT 13:22:33 ON 07 MAR 2003

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FILE 'USPATFULL' ENTERED AT 13:22:33 ON 07 MAR 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 13:22:33 ON 07 MAR 2003

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=> d his

(FILE 'HOME' ENTERED AT 13:20:09 ON 07 MAR 2003)

FILE 'REGISTRY' ENTERED AT 13:20:19 ON 07 MAR 2003

L1 STRUCTURE UPLOADED

L2 QUE L1

L3 44 S L2

L4 1005 S L2 FULL

E DOTA/CN

L5 1 S E3

L6 SCREEN 2040

L7 STRUCTURE UPLOADED

L8 QUE L7 AND L6

L9 2 S L8

L10 38 S L8 FULL

FILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 13:22:33 ON
07 MAR 2003

=> s l10

L11 29 L10

=> s l5

L12 673 L5

=> s l11 and (peptid? of polypeptid?)

L13 0 L11 AND (PEPTID? OF POLYPEPTID?)

=> s l11 and peptid?

L14 12 L11 AND PEPTID?

=> s l11 and (peptid? or polypeptid?)

L15 12 L11 AND (PEPTID? OR POLYPEPTID?)

=> s l15 and proteas?

L16 0 L15 AND PROTEAS?

<C

09/405,046

Page 10

```
=> dup l15
ENTER REMOVE, IDENTIFY, ONLY, OR (?):rem
PROCESSING COMPLETED FOR L15
L17          12 DUP REM L15 (0 DUPLICATES REMOVED)
```

```
=> d ibib ab hitstr 1-
YOU HAVE REQUESTED DATA FROM 12 ANSWERS - CONTINUE? Y/(N):y
```

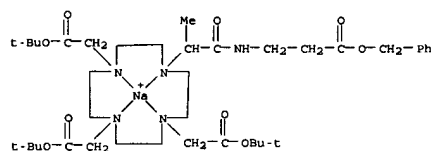
L17 ANSWER 1 OF 12 USPATFULL
ACCESSION NUMBER: 2002:329422 USPATFULL
TITLE: Cascade polymer complexes, process for their production
INVENTOR(S): and pharmaceutical agents containing said complexes
Schmitt-Willich, Heribert, Berlin, GERMANY, FEDERAL REPUBLIC OF
Platzek, Johannes, Berlin, GERMANY, FEDERAL REPUBLIC OF
OF Raduchel, Bernd, Berlin, GERMANY, FEDERAL REPUBLIC OF
Muhler, Andreas, Neuenhagen, GERMANY, FEDERAL REPUBLIC OF
Frenzel, Thomas, Berlin, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Schering AG, Berlin, GERMANY, FEDERAL REPUBLIC OF
(non-U.S. corporation)

NUMBER	KIND	DATE
US 2002187101	A1	20021212
US 2002-138651	A1	20020506 (10)
Division of Ser. No. US 2000-620989, filed on 20 Jul 2000, GRANTED, Pat. No. US 6426059 Division of Ser.		
No.		
US 1998-44254, filed on 19 Mar 1998, GRANTED, Pat. No. US 6177060 Division of Ser. No. US 1996-674844, filed on 3 Jul 1996, GRANTED, Pat. No. US 5820849		

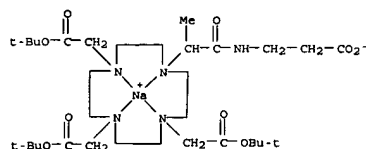
NUMBER	DATE
DE 1995-19525924	19950704

PRIORITY INFORMATION:
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 2106
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Cascade polymer complexes with at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, useful NMR or x-ray lymphography imaging.
IT 186095-26-1P 186095-27-2P 186095-30-7P
186095-31-8P 186095-35-2P 186095-36-3P
(prepn. of cascade polymer complexes as medical contrast media)
RN 186095-26-1 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl]amino)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 1 OF 12 USPATFULL (Continued)

● Br⁻

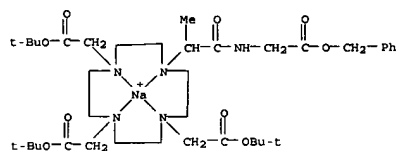
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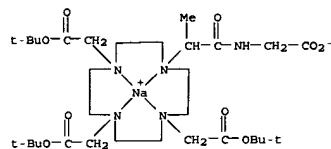
● HBr

RN 186095-35-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl]amino)-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 1 OF 12 USPATFULL (Continued)

● Br⁻

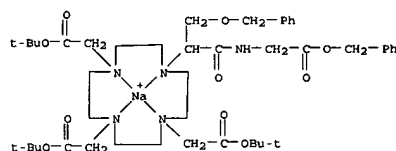
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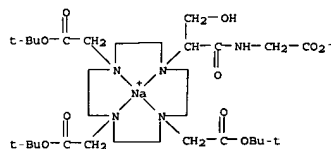
● HBr

RN 186095-30-7 USPATFULL
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L17 ANSWER 1 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-36-3 USPATFULL
CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

L17 ANSWER 2 OF 12 USPATFULL
ACCESSION NUMBER: 2002:188111 USPATFULL
TITLE: Cascade polymer complexes, process for their production
INVENTOR(S): and pharmaceutical agents containing said complexes
Schmitt-Willich, Heribert, Gorrestrasse 20, D-12161 Berlin, GERMANY, FEDERAL REPUBLIC OF
Platzek, Johannes, Grottkauer Str. 55, D-12621 Berlin, GERMANY, FEDERAL REPUBLIC OF
Raduchel, Bernd, Gollanczstrasse 132, D-13465 Berlin, GERMANY, FEDERAL REPUBLIC OF
Muhler, Andreas, Fontanestrasse 21A, D-15366 Neuenhagen, GERMANY, FEDERAL REPUBLIC OF
Frenzel, Thomas, Paul-Schneider-Strasse 41, D-12247 Berlin, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6426059	B1	20020730
APPLICATION INFO.:	US 2000-620989		20000720 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-44254, filed on 19 Mar 1998, now patented, Pat. No. US 6177060 Division of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Hartley, Michael G.	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	1946	

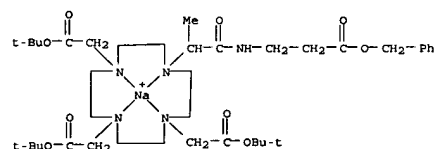
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cascade polymer complexes with at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, useful NMR or x-ray lymphography imaging.

IT 186095-26-1P 186095-27-2P 186095-30-7P
186095-31-8P 186095-35-2P 186095-36-3P
(prepn. of cascade polymer complexes as medical contrast media)

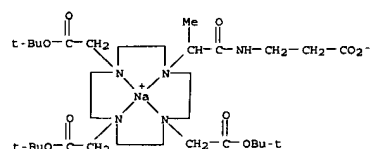
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CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 2 OF 12 USPATFULL (Continued)



● Br⁻

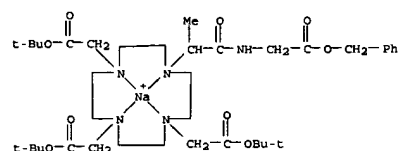
RN 186095-31-8 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-[[2-carboxyethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

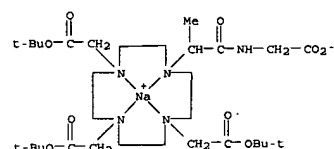
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L17 ANSWER 2 OF 12 USPATFULL (Continued)



● Br⁻

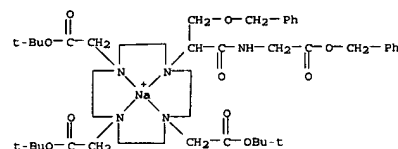
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● HBr

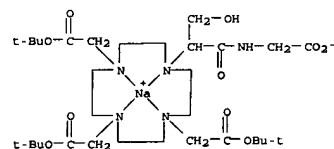
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L17 ANSWER 2 OF 12 USPATFULL (Continued)



● Br⁻

RN 186095-36-3 USPATFULL
CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[2-carboxyethyl]amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:417174 CAPLUS
DOCUMENT NUMBER: 137:151859
TITLE: Modification of the Structure of a Metallopeptide:
Synthesis and Biological Evaluation of ¹¹¹In-Labeled
DOTA-Conjugated Rhenium-Cyclized .alpha.-MSH

Analogue:
AUTHOR(S): Cheng, Zhen; Chen, Jianqing; Miao, Yubin; Owen,
Nellie

CORPORATE SOURCE: K.; Quinn, Thomas P.; Jurisson, Silvia S.
Department of Chemistry, University of
Missouri-Columbia, Columbia, MO, 65211, USA
SOURCE: Journal of Medicinal Chemistry (2002), 45(14),
3048-3056

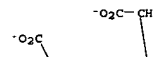
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rhenium-cyclized CCMSh analogs are novel melanoma-targeting
metallopeptides with high tumor uptake, long tumor retention, and low
background in normal tissues, which make these metallopeptides an ideal
structural motif for designing novel melanoma-targeting agents. ReCCMSH
has been derivatized with a 1,4,7,10-tetraazacyclododecane-1,4,7,10-
tetraacetic acid (DOTA) chelate so that it can be labeled with a wide
variety of radionuclides for imaging and therapeutic applications. This
study involved optimization of the in vivo biol. properties of
DOTA-ReCCMSH (5), through modification of the structure of the
metallopeptide. Several DOTA-ReCCMSH analogs, Ac-Lys(DOTA)-ReCCMSH (4)
DOTA-ReCCMSH(Arg11) (6), DOTA-ReCCMSH-OH (8), and DOTA-ReCCMSH-Asp-OH
(10), were synthesized using solid phase peptide synthesis
followed by rhenium cyclization. The IC50 values of the metallopeptides
were detd. through competitive binding assays against 125I-(Tyr2)-NDP.
Radiolabeling of the DOTA-rhenium-cyclized peptides with ¹¹¹In
was carried out in NH4OAc (0.1 M; pH 5.5)-buffered soln. for 30 min at 70
.degree.C. The stability of the radiolabeled complexes was evaluated in
0.01 M, pH 7.4, phosphate-buffered saline/0.1% bovine serum albumin soln.
After sepn. of the radiolabeled peptide from the unlabeled
peptide by reverse phase high-performance liq. chromatog., the
biodistribution of the radiolabeled complex was performed in C57 mice
bearing B16/F1 murine melanoma tumors. All radiolabeled complexes showed
fast blood clearance (2 h postinjection (pi): ¹¹¹In-5, 0.07 +/- 0.03%
ID/g; ¹¹¹In-4, 0.09 +/- 0.06% ID/g; ¹¹¹In-6, 0.21 +/- 0.08% ID/g;
¹¹¹In-8, 0.11 +/- 0.10% ID/g; and ¹¹¹In-10, 0.05 +/- 0.03% ID/g), and
their clearance was predominantly through the urine (4 h pi: 93.5 +/-
1.7, 87.8 +/- 6.5, 89.8 +/- 4.2, 93.3 +/- 1.1, and 93.8 +/- 1.8 (%
ID)

for ¹¹¹In-labeled 5, 4, 6, 8, and 10, resp.). Tumor uptake values of
+/- 0.90, 6.01 +/- 2.36, 17.41 +/- 5.61, 9.27 +/- 0.68, and 7.32 +/-
2.09 (% ID/g) for ¹¹¹In-labeled 5, 4, 6, 8, and 10, resp., were obsd. at
4 h pi. The kidney uptake was 9.27 +/- 2.65% ID/g for ¹¹¹In-5, 19.02 +/-
2.63% ID/g for ¹¹¹In-4, 7.37 +/- 1.13% ID/g for ¹¹¹In-6, 8.70 +/- 0.88%
ID/g for ¹¹¹In-8, and 8.13 +/- 1.47% ID/g for ¹¹¹In-10 at 4 h pi.
Complex 6 showed high melanoma uptake and lower kidney uptake than the
corresponding Lys11 analogs, supporting 6 for further investigations as a
potential therapeutic radiopharmaceutical.

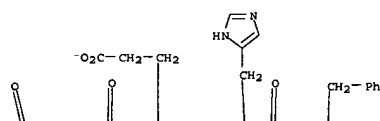
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(Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
(Uses)
(synthesis and melanoma uptake of ¹¹¹In-labeled DOTA-conjugated
rhenium-cyclized .alpha.-MSH analogs)
RN 445235-02-9 CAPLUS
CN Indate(4-)-¹¹¹In, oxo[N-[[[4,7,10-tris(carboxymethyl)-1,4,7,10-
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L-kappa.N..kappa.S-L..alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-
tryptophyl-L-cysteiny]-L-kappa.S-L-lysyl-L-prolyl-L-valinamidato(8-)]-,
tetrahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

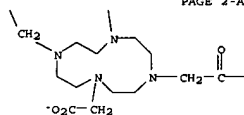


L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

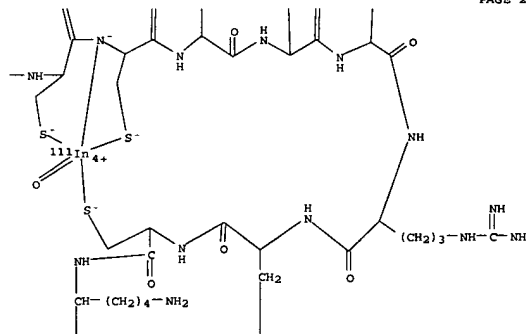


PAGE 2-A

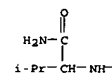


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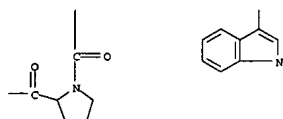
PAGE 2-B



PAGE 3-A

● 4 H⁺

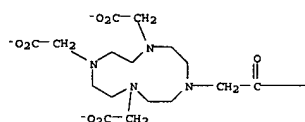
PAGE 3-B



IT 445234-99-1P 445235-00-7P 445235-01-8P

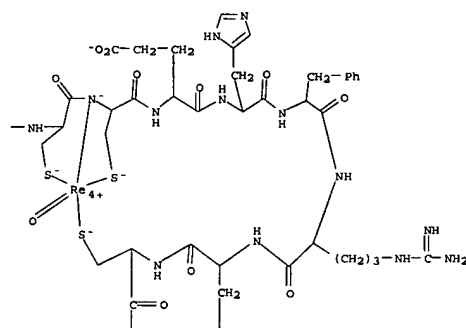
L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)
RL: BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and melanoma uptake of ¹¹¹In-labeled DOTA-conjugated rhenium-cyclized .alpha.-MSH analogs)
RN 445234-99-1 CAPLUS
CN Rhenate(4-), oxo[N-[[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-cysteinyl-.kappa.S-L-cysteinyl-.kappa.N,.kappa.S-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteinyl-.kappa.S-L-arginyl-L-prolyl-L-valinamidato(8-)]-, tetrahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

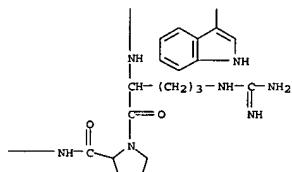


PAGE 2-A

● 4 H⁺

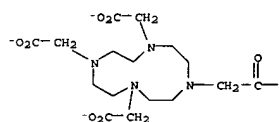
L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



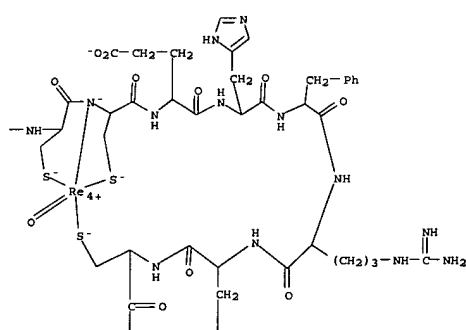
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PAGE 1-A



L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



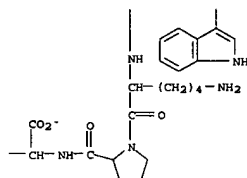
PAGE 2-A

i-Pr

● 5 H⁺

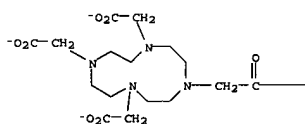
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PAGE 2-B

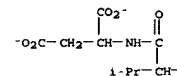


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PAGE 1-A

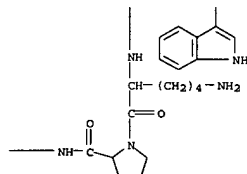


PAGE 2-A

● 6 H⁺

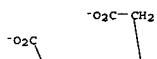
L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



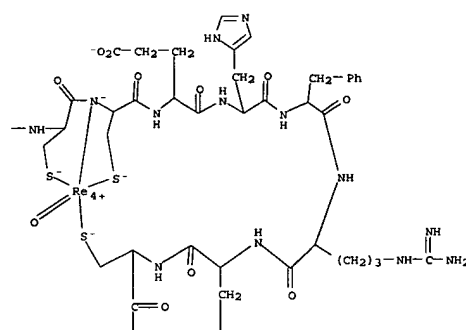
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 445241-14-5P
 RL: DGN (Diagnostic use); PKT (Pharmacokinetics); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (synthesis and melanoma uptake of 111In-labeled DOTA-conjugated rhenium-cyclized .alpha.-MSH analogs)
 RN 445235-03-0 CAPLUS
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PAGE 1-A



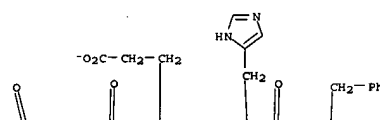
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PAGE 1-B

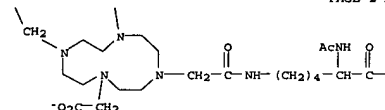


L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

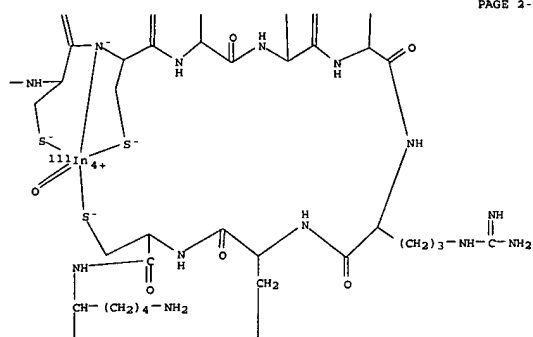


PAGE 2-A

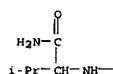


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PAGE 2-B



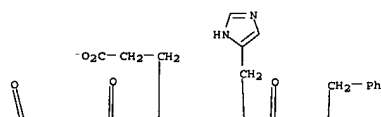
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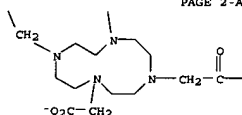
● 4 H⁺

L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



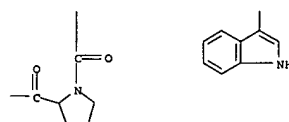
PAGE 2-A



● 5 H⁺

L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 3-B

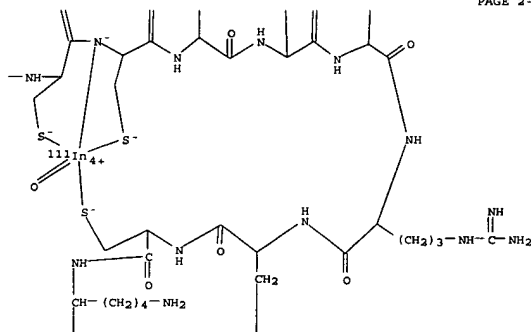


RN 445235-04-1 CAPLUS
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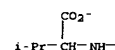
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L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

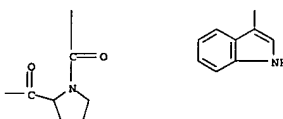
PAGE 2-B



PAGE 3-A



PAGE 3-B



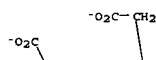
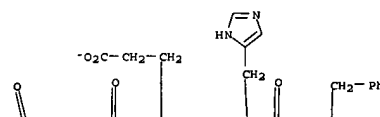
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L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)
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, hexahydrogen (9CI) (CA INDEX NAME)

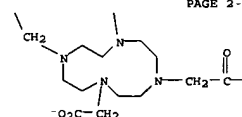
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L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

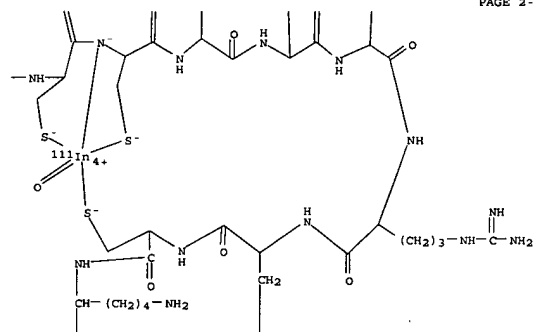


PAGE 2-A

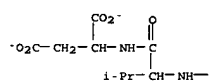


L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

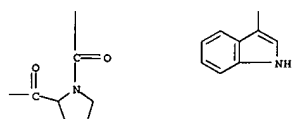
PAGE 2-B



PAGE 3-A

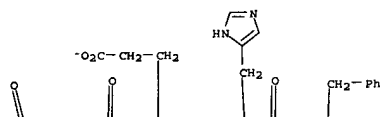
● 6 H⁺

PAGE 3-B

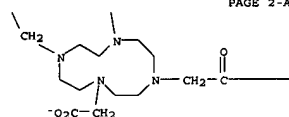


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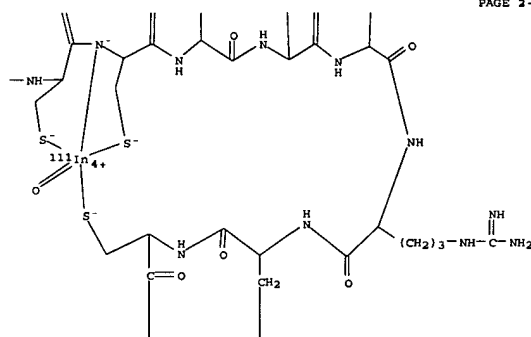
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PAGE 2-A



PAGE 2-B

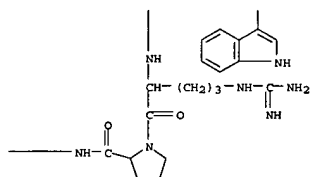


PAGE 3-A

● 4 H⁺

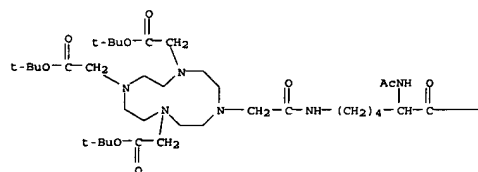
L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 3-B

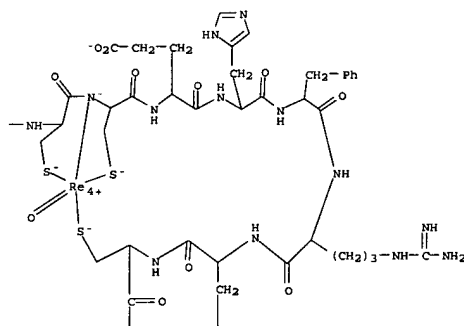


IT 445234-97-9P 445234-98-0P
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 RN 445234-97-9 CAPLUS
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PAGE 1-A

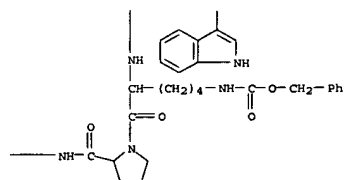


PAGE 2-A

● H⁺

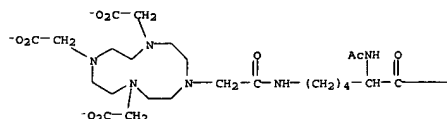
L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



RN 445234-98-0 CAPLUS
CN Rhenate(4-), [N2-acetyl-N6-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-lysyl-L-cysteiny]-.kappa.S-L-cysteiny]-.kappa.N,.kappa.S-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteiny]-.kappa.S-L-lysyl-L-prolyl-L-valinamidato(8-)]oxo-, tetrahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

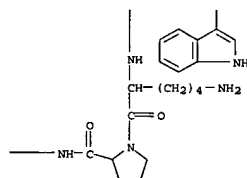


PAGE 2-A

● 4 H⁺

L17 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L17 ANSWER 4 OF 12 USPATFULL

ACCESSION NUMBER: 2001:95283 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainboro, NJ, United States
Ramalingam, Kondareddiar, Dayton, NJ, United States
Linder, Karen E., Kingston, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Tweedle, Michael F., Princeton, NJ, United States

NUMBER	KIND	DATE
US 2001004454	A1	20010621
US 2000-752867	A1	20001230 (9)
Division of Ser. No. US 2000-477072,		filed on 3 Jan 2000, PENDING Division of Ser. No. US 1998-80157,
filed		on 16 May 1998, GRANTED, Pat. No. US 6093382
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	The Law Offices of Imre Balogh, 276 Smith School Road, Perkasie, PA, 18944	
NUMBER OF CLAIMS:	127	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	32 Drawing Page(s)	
LINE COUNT:	4979	

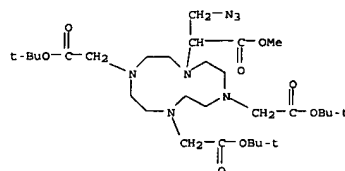
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-67-0P (reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-67-0 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, .alpha.-(azidomethyl)-, .alpha.',.alpha.',.alpha.''-tris(1,1-dimethylethyl) .alpha.-methyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 4 OF 12 USPATFULL (Continued)

L17 ANSWER 5 OF 12 USPATFULL

ACCESSION NUMBER: 2001:59359 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainsboro, NJ, United States
Ramalingam, Kondareddiar, Dayton, NJ, United States
Linder, Karen E., Kingston, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Tweedle, Michael F., Princeton, NJ, United States
PATENT ASSIGNEE(S): Bracco Research USA, Inc., Princeton, NJ, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6221334	B1	20010424
APPLICATION INFO.:	US 2000-477072		20000103 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-80157,		filed on 16 May 1998, now patented, Pat. No. US 6093382
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, Dameron L.		
LEGAL REPRESENTATIVE:	Balogh, Imre		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	31 Drawing Figure(s); 31 Drawing Page(s)		
LINE COUNT:	1407		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

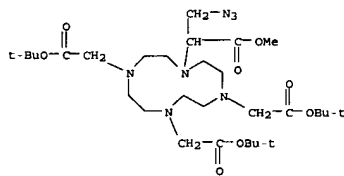
AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-67-0P (reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-67-0 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, .alpha.-(azidomethyl)-, .alpha.', .alpha.', .alpha.''-tris(1,1-dimethylethyl) .alpha.-methyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 5 OF 12 USPATFULL (Continued)



L17 ANSWER 6 OF 12 USPATFULL

ACCESSION NUMBER: 2001:10522 USPATFULL
TITLE: Cascade polymer complexes, process for their production
INVENTOR(S): and pharmaceutical agents containing said complexes
Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
Platzek, Johannes, Berlin, Germany, Federal Republic of
of Raduchel, Bernd, Berlin, Germany, Federal Republic of
Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
Frenzel, Thomas, Berlin, Germany, Federal Republic of
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Berlin, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6177060	B1	20010123
APPLICATION INFO.:	US 1998-44254		19980319 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1996-674844,		filed on 3 Jul 1996, now patented, Pat. No. US 5820849

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelano & Branigan, P.C.	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	1880	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

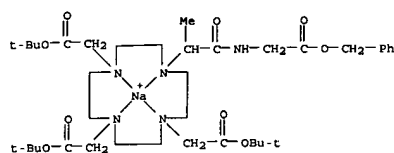
AB Cascade polymer complexes with at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, useful NMR or x-ray lymphography imaging.

IT 186095-26-1P 186095-27-2P 186095-30-7P
186095-31-8P 186095-35-2P 186095-36-3P
(prepn. of cascade polymer complexes as medical contrast media)

RN 186095-26-1 USPATFULL

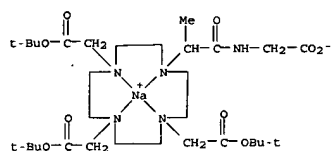
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate- Kappa.N1, Kappa.N4, Kappa.N7, Kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 6 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

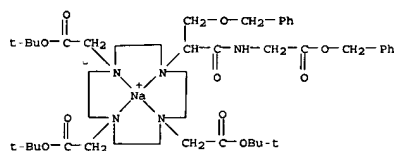


● HBr

RN 186095-30-7 USPATFULL

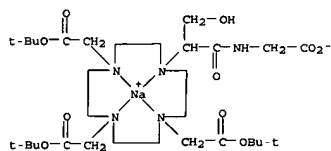
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 6 OF 12 USPATFULL (Continued)

● Br⁻

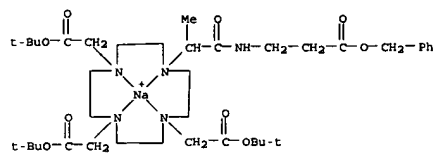
RN 186095-36-3 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



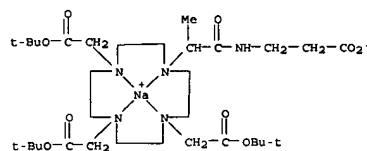
● HBr

L17 ANSWER 6 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 7 OF 12 USPATFULL

ACCESSION NUMBER: 2000:174826 USPATFULL
 TITLE: Cascade polymer complexes, process for their production
 INVENTOR(S): and pharmaceutical agents containing said complexes
 Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
 Platzek, Johannes, Berlin, Germany, Federal Republic of
 of Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
 Frenzel, Thomas, Berlin, Germany, Federal Republic of
 Schering Aktiengesellschaft, Germany, Federal Republic of
 PATENT ASSIGNEE(S): of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6166200		20001226
APPLICATION INFO.:	US 1999-345807		19990702 (9)
RELATED APPL. INFO.:	Division of Ser. No. US 1998-44254, filed on 19 Mar 1998 which is a division of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Dees, Jose' G.	
ASSISTANT EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelano, & Branigan, P.C.	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	1904	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB Cascade polymer complexes that contain

a) complexing ligands of general formula I

A--[X--[Y--(Z--W--K.sub.W .sub.z).sub.y].sub.x).sub.a (I),

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity a,

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w,

K stands for the radical of a complexing agent,

a stands for numbers 2 to 12,

x, y, z and w, independently of one another, stand for numbers 1 to 4,

provides that at least two reproduction units are different and that

for

L17 ANSWER 7 OF 12 USPATFULL (Continued)
the product of the multiplicities,

16.ltoreq.a.multidot.x.multidot.y.multidot.z.multidot.w.ltoreq.64

holds true,

b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42,
or 57-83,

c) optionally cations of inorganic and/or organic bases, amino acids or amino acid amides as well as

d) optionally acylated terminal amino groups are valuable compounds for diagnosis and therapy.

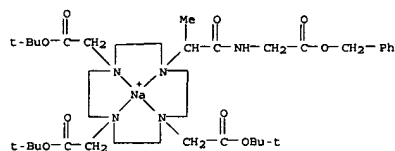
IT 186095-26-1P 186095-27-2P 186095-30-7P

186095-31-8P 186095-35-2P 186095-36-3P

(prepn. of cascade polymer complexes as medical contrast media)

RN 186095-26-1 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

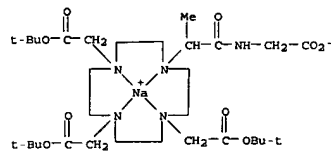


● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

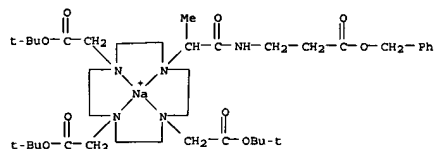
L17 ANSWER 7 OF 12 USPATFULL (Continued)



● HBr

RN 186095-30-7 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

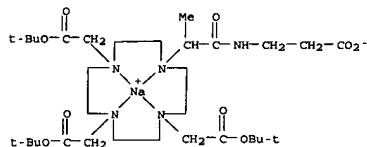


● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

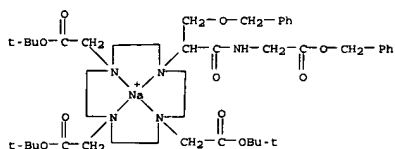
L17 ANSWER 7 OF 12 USPATFULL (Continued)



● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

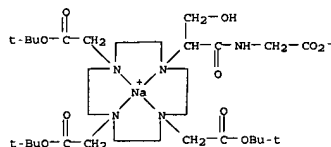


● Br⁻

RN 186095-36-3 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 7 OF 12 USPATFULL (Continued)



● HBr

L17 ANSWER 8 OF 12 USPATFULL
ACCESSION NUMBER: 2000:94681 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainsboro, NJ, United States
Ramalingam, Kondareddiar, Dayton, NJ, United States
Linder, Karen E., Kingston, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Tweedle, Michael F., Princeton, NJ, United States
PATENT ASSIGNEE(S): Bracco Research USA Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6093382		20000725
APPLICATION INFO.:	US 1998-80157		19980516 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Dees, Jose' G.		
ASSISTANT EXAMINER:	Jones, Dameron		
LEGAL REPRESENTATIVE:	Balogh, Imre		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 8 Drawing Page(s)		
LINE COUNT:	3756		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-67-0P
(reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-67-0 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, .alpha.-[azidomethyl]-, .alpha.-',.alpha.-'',.alpha.-'''-tris(1,1-dimethylethyl) .alpha.-methyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 9 OF 12 USPATFULL
ACCESSION NUMBER: 2000:61178 USPATFULL
TITLE: Cascade polymer complexes, process for their production
INVENTOR(S): Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
Platzek, Johannes, Berlin, Germany, Federal Republic of
of Raduchel, Bernd, Berlin, Germany, Federal Republic of
Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
Frenzel, Thomas, Berlin, Germany, Federal Republic of
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6063361		20000516
APPLICATION INFO.:	US 1998-40364		19980318 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Dees, Jose' G.	
ASSISTANT EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelane & Branigan, P.C.	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	2098	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cascade polymer complexes having a complexing ligand with at least two different reproduction units and having a complexing agent which is a macrocyclic group having an amide grouping or a linear DTPA-type group having a linkage to the polymer through the central nitrogen.

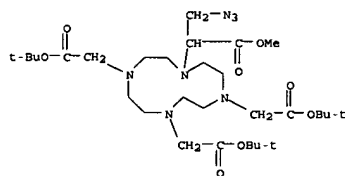
IT 186095-26-1P 186095-27-2P 186095-30-7P
186095-31-8P 186095-35-2P 186095-36-3P

(prepn. of cascade polymer complexes as medical contrast media)

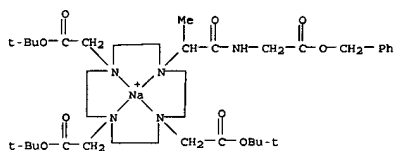
RN 186095-26-1 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 8 OF 12 USPATFULL (Continued)



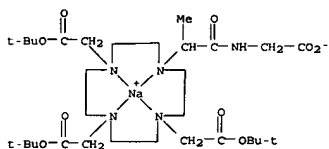
L17 ANSWER 9 OF 12 USPATFULL (Continued)



● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

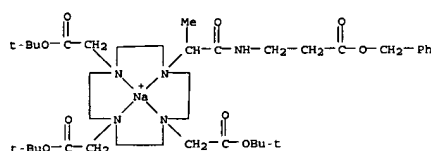


● HBr

RN 186095-30-7 USPATFULL

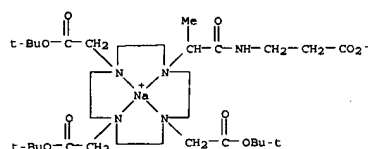
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 9 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 10 OF 12 USPATFULL

ACCESSION NUMBER: 2000:54202 USPATFULL
 TITLE: Cascade polymer complexes, process for producing the same and pharmaceuticals containing the same
 INVENTOR(S): Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
 of Platzek, Johannes, Berlin, Germany, Federal Republic
 of Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Weinmann, Hanns-Joachim, Berlin, Germany, Federal Republic of
 of Ebert, Wolfgang, Berlin, Germany, Federal Republic of
 Misselwitz, Bernd, Berlin, Germany, Federal Republic
 of Muhler, Andreas, Berlin, Germany, Federal Republic of
 Frenzel, Thomas, Berlin, Germany, Federal Republic of
 PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6057419		20000502
	WO 9723245		19970703
APPLICATION INFO.:	US 1998-77773		19980604 (9)
	WO 1996-EP5315		19961129
			19980604 PCT 371 date
			19980604 PCT 102(e) date

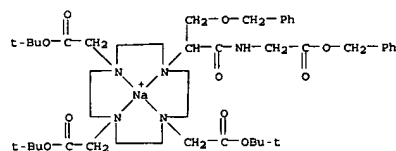
	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19549286	19951222
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Truong, Duc	
LEGAL REPRESENTATIVE:	Millen, White, Zelano, & Branigan, P.C.	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2064	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Cascade polymer complexes that contain a) complexing ligands of general formula (I), in which A stands for a nitrogen-containing cascade nucleus of base multiplicity a, X and Y, independently of one another, stand for

a direct bond or a cascade reproduction unit of reproduction multiplicity x or y, z and w, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w, K stands for the radical of a complexing agent, a stands for numbers 2 to 12, x, y, z and w, independently of one another, stand for numbers 1 to 4, provided that at least two reproduction units are different, and that 16.itoreq.x.multidot.y.multidot.z.multidot.w.ltoreq.64 holds true for the product of the multiplicities and that at least one of cascade reproduction units X, Y, Z, W stands for a 1,4,7,10-tetraazacyclododecane or 1,4,8,11-tetraazacyclotetradecane reproduction unit, b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, c) optionally cations of inorganic and/or organic bases, amino acids or amino acid amides as well as d) optionally acylated terminal amino groups are valuable compounds for diagnosis and therapy.

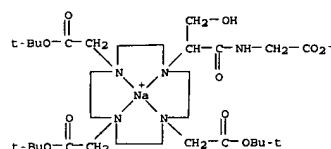
IT 186095-27-2P 192635-90-8P 192635-91-9P
 192635-96-4P 192636-00-3P

L17 ANSWER 9 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-36-3 USPATFULL

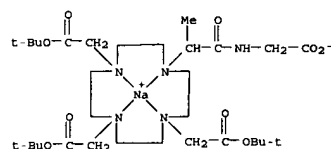
CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

L17 ANSWER 10 OF 12 USPATFULL (Continued)

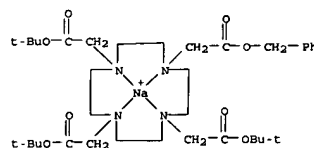
(cascade polymer precursor; nitrogen-contg. cascade polymer transition metal complexes and their manuf. and use in pharmaceuticals and diagnostic agents)
 RN 186095-27-2 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

RN 192635-90-8 USPATFULL

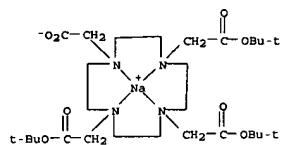
CN Sodium(1+), [tris(1,1-dimethylethyl) phenylmethyl 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

● Br⁻

RN 192635-91-9 USPATFULL

CN Sodium, [tris(1,1-dimethylethyl) 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

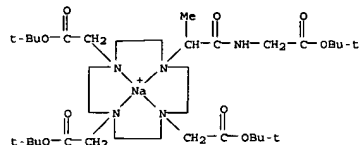
L17 ANSWER 10 OF 12 USPATFULL (Continued)



● HBr

RN 192635-96-4 USPATFULL

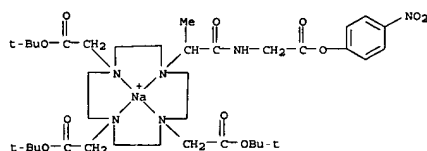
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-[[2-(1,1-dimethylethoxy)-2-oxoethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA INDEX NAME)

● Br⁻

RN 192636-00-3 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA INDEX NAME)

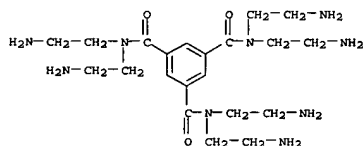
L17 ANSWER 10 OF 12 USPATFULL (Continued)

● Br⁻

CM 2

CRN 192635-87-3

CMF C21 H39 N9 O3 . x Br H



● x HBr

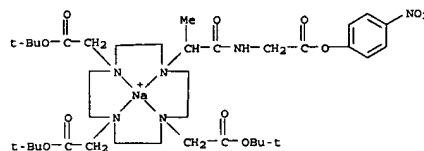
CM 3

CRN 192635-86-2

CMF C84 H99 N11 O21

Absolute stereochemistry.

L17 ANSWER 10 OF 12 USPATFULL (Continued)

● Br⁻

IT 192636-01-4DP, gadolinium complexes 192636-09-2DP, gadolinium complexes 192636-17-2DP, gadolinium complexes 192636-25-2DP, gadolinium complexes 192636-31-0DP, gadolinium complexes

(nitrogen-contg. cascade polymer transition metal complexes and their manuf. and use in pharmaceuticals and diagnostic agents)

RN 192636-01-4 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)

10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N'',N''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and 4-nitrophenyl [2-oxo-2-[4,7,10-tris[(2S)-1-oxo-2,6-

bis[(phenylmethoxy)carbonyl]amino]hexyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 192636-00-3

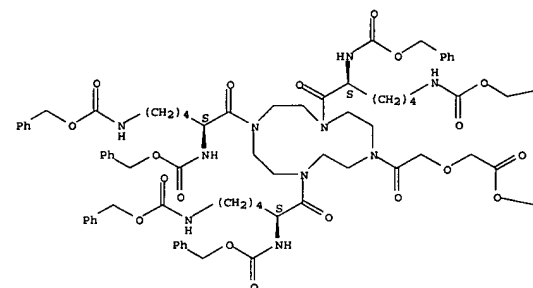
CMF C37 H60 N6 Na O11 . Br

CCI CCS

CDES 7:7-4

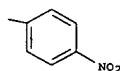
L17 ANSWER 10 OF 12 USPATFULL (Continued)

PAGE 1-A



PAGE 1-B

— Ph



RN 192636-09-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)

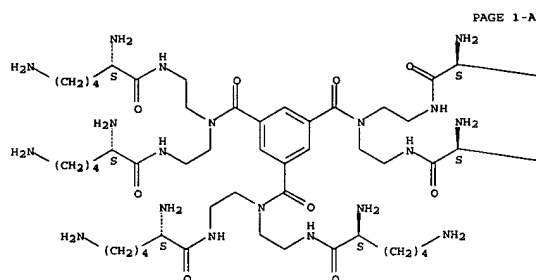
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N'',N''-hexakis[2-[[[(2S)-2,6-diamino-1-oxohexyl]amino]ethyl]-1,3,5-benzenetricarboxamide hydrobromide (9CI) (CA INDEX NAME)

CM 1

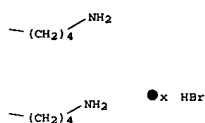
L17 ANSWER 10 OF 12 USPATFULL (Continued)

CRN 192636-06-9
 CMP C57 H111 N21 O9 . x Br H

Absolute stereochemistry.



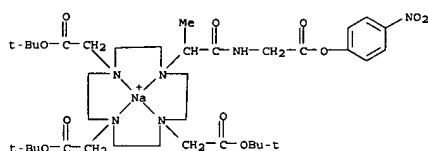
PAGE 1-B



CM 2
 CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

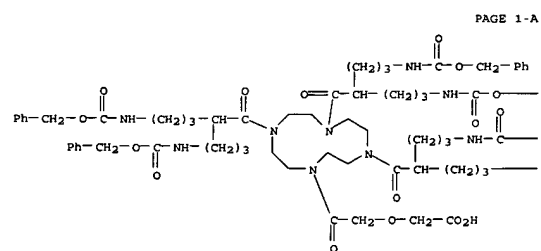
L17 ANSWER 10 OF 12 USPATFULL (Continued)

CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

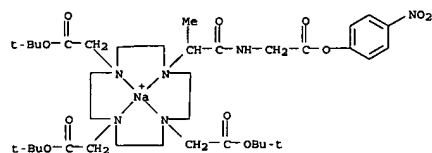
• Br⁻

RN 192636-25-2 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl)
 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N'',N''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and [2-oxo-2-[4,7,10-tris[1-oxo-5-[[[(phenylmethoxy)carbonyl]amino]-2-[3-[[[(phenylmethoxy)carbonyl]amino]propyl]pentyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI) (CA INDEX NAME)

CM 1
 CRN 192636-23-0
 CMP C84 H108 N10 O19

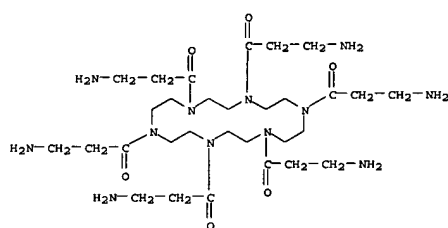


L17 ANSWER 10 OF 12 USPATFULL (Continued)

• Br⁻

RN 192636-17-2 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl)
 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with 1,4,7,10,13,16-hexakis(3-amino-1-oxopropyl)-1,4,7,10,13,16-hexaazacyclooctadecane hydrobromide (9CI) (CA INDEX NAME)

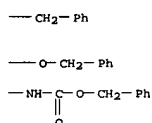
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 CRN 192636-15-0
 CMP C30 H60 N12 O6 . x Br H



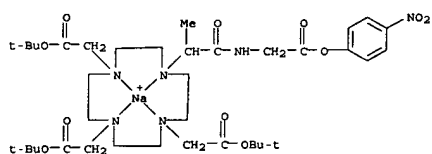
• x HBr

CM 2

L17 ANSWER 10 OF 12 USPATFULL (Continued)



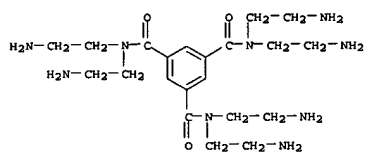
CM 2
 CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

• Br⁻

CM 3
 CRN 192635-87-3
 CMP C21 H39 N9 O3 . x Br H

PAGE 1-B

L17 ANSWER 10 OF 12 USPATFULL (Continued)



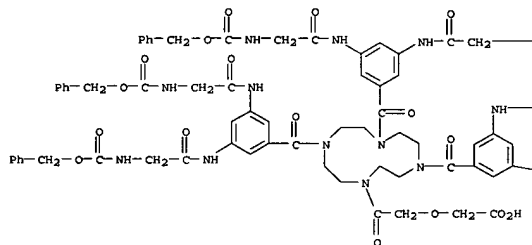
● x HBr

RN 192636-31-0 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl)
 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with
 N,N,N',N',N'',N''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and
 [2-oxo-2-[4,7,10-tris[3,5-bis[[[(phenylmethoxy)carbonyl]amino]acetyl]amino]benzoyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI) (CA INDEX NAME)

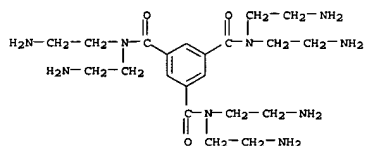
CM 1

CRN 192636-29-6
 CMF C93 H96 N16 O25

PAGE 1-A



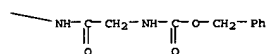
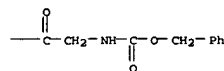
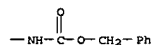
L17 ANSWER 10 OF 12 USPATFULL (Continued)



● x HBr

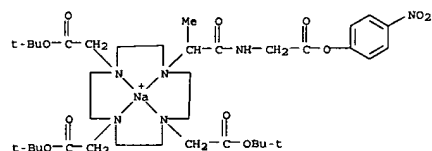
L17 ANSWER 10 OF 12 USPATFULL (Continued)

PAGE 1-B



CM 2

CRN 192636-00-3
 CMF C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4



● Br-

CM 3

CRN 192635-87-3
 CMF C21 H39 N9 O3 . x Br H

L17 ANSWER 11 OF 12 USPATFULL

ACCESSION NUMBER: 1999:24287 USPATFULL
 TITLE: Cascade polymer complexes, process for their production
 INVENTOR(S): and pharmaceutical agents containing said complexes
 Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
 Platzek, Johannes, Berlin, Germany, Federal Republic of
 of Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Weinmann, Hanns-Joachim, Berlin, Germany, Federal Republic of
 Ebert, Wolfgang, Berlin, Germany, Federal Republic of
 Misselwitz, Bernd, Berlin, Germany, Federal Republic of
 of Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
 Prenzler, Thomas, Berlin, Germany, Federal Republic of
 PATENT ASSIGNER(S): Schering Aktiengesellschaft, Berlin, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5874061		19990223
APPLICATION INFO.:	US 1996-777666		19961220 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19549286	19951222
	US 1996-9619P	19960105 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Dees, Jose G.	
ASSISTANT EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelano, & Branigan, P.C.	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	2265	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cascade polymer complexes that contain

a) complexing ligands of general formula I

A--[X--[Y--(Z--(W--K.sub.w).sub.z).sub.y).sub.x].sub.a. (I)

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity a,

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w,

K stands for the radical of a complexing agent, a stands for numbers 2 to 12, x, y, z and w, independently of one another, stand for numbers 1 to 4,

L17 ANSWER 11 OF 12 USPATFULL (Continued)
provided that at least two reproduction units are different, that
16.ltoreq.a.multidot.x.multidot.y.multidot.z.multidot.w.ltoreq.64 holds
true for the product of the multiplicities, and that at least one of
cascade reproduction units X, Y, Z, W stands for a 1,4,7,10-
tetraazacyclododecane or 1,4,8,11-tetraazacyclotetradecane reproduction
unit,

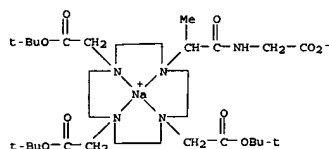
b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42,
or 57-83,
c) optionally cations of inorganic and/or organic bases, amino acids or
amino acid amides as well as
d) optionally acylated terminal amino groups are valuable compounds for
diagnosis and therapy.

IT 186095-27-2P 192635-90-8P 192635-91-9P
192635-96-4P 192636-00-3P

(cascade polymer precursor; nitrogen-contg. cascade polymer transition
metal complexes and their manuf. and use in pharmaceuticals and
diagnostic agents)

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[carboxymethyl]amino]-1-
methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-
.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-
(9CI) (CA INDEX NAME)

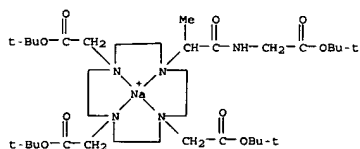


● HBr

RN 192635-90-8 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) phenylmethyl 1,4,7,10-
tetraazacyclododecane-1,4,7,10-tetraacetate
.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA
INDEX NAME)

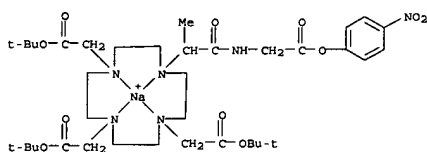
L17 ANSWER 11 OF 12 USPATFULL (Continued)



● Br⁻

RN 192636-00-3 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-
(9CI) (CA INDEX NAME)



● Br⁻

IT 192636-01-4DP, gadolinium complexes 192636-09-2DP,
gadolinium complexes 192636-17-2DP, gadolinium complexes
192636-25-2DP, gadolinium complexes 192636-31-0DP,
gadolinium complexes

(nitrogen-contg. cascade polymer transition metal complexes and their
manuf. and use in pharmaceuticals and diagnostic agents)

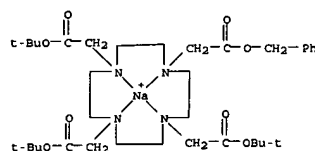
RN 192636-01-4 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer
with

N,N',N'',N'''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide
hydrobromide and 4-nitrophenyl [2-oxo-2-[4,7,10-tris[(2S)-1-oxo-2,6-

bis[[[phenylmethoxy]carbonyl]amino]hexyl]-1,4,7,10-tetraazacyclododec-1-
yl]ethoxy]acetate (9CI) (CA INDEX NAME)

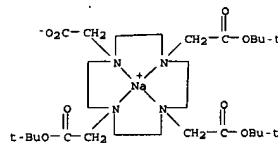
L17 ANSWER 11 OF 12 USPATFULL (Continued)



● Br⁻

RN 192635-91-9 USPATFULL

CN Sodium, [tris(1,1-dimethylethyl) 1,4,7,10-tetraazacyclododecane-1,4,7,10-
tetraacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)- (9CI) (CA INDEX NAME)



● HBr

RN 192635-96-4 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-[[2-(1,1-dimethylethoxy)-2-
oxoethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-
1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide,
(T-4)- (9CI) (CA INDEX NAME)

L17 ANSWER 11 OF 12 USPATFULL (Continued)

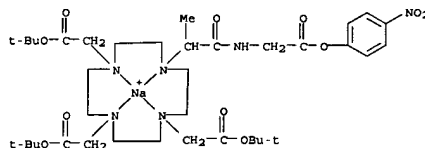
CM 1

CRN 192636-00-3

CMF C37 H60 N6 Na O11 . Br

CCI CCS

CDES 7:T-4

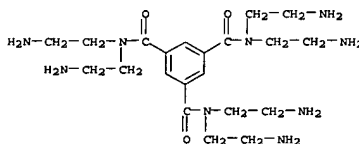


● Br⁻

CM 2

CRN 192635-87-3

CMF C21 H39 N9 O3 . x Br H



● x HBr

CM 3

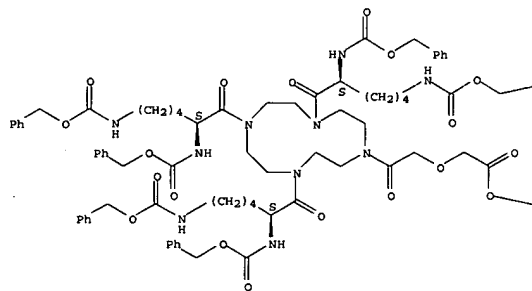
CRN 192635-86-2

CMF C84 H99 N11 O21

Absolute stereochemistry.

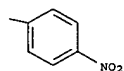
L17 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-A



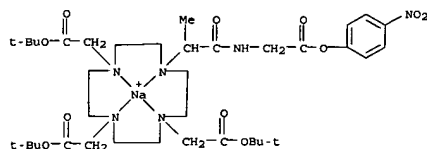
PAGE 1-B

Ph



RN 192636-09-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl)
10- [1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N'',N'''-hexakis[2-[[[(2S)-2,6-diamino-1-

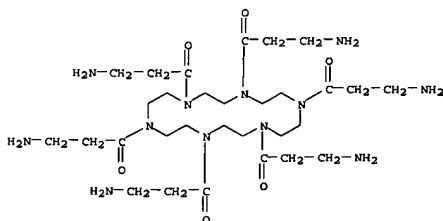
L17 ANSWER 11 OF 12 USPATFULL (Continued)

● Br⁻

RN 192636-17-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl)
10- [1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with 1,4,7,10,13,16-hexakis(3-amino-1-oxopropyl)-1,4,7,10,13,16-hexaazacyclooctadecane hydrobromide (9CI) (CA INDEX NAME)

CM 1

CRN 192636-15-0
CMF C30 H60 N12 O6 . x Br H



● x HBr

CM 2

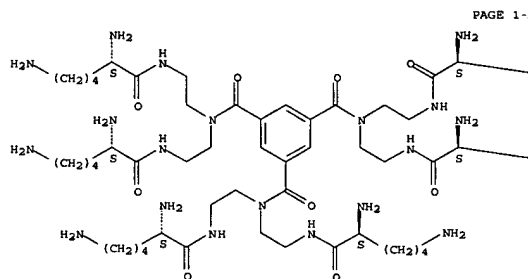
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CMF C37 H60 N6 Na O11 . Br

L17 ANSWER 11 OF 12 USPATFULL (Continued)
oxohexyl]amino]ethyl]-1,3,5-benzenetricarboxamide hydrobromide (9CI)
(CA INDEX NAME)

CM 1

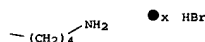
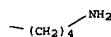
CRN 192636-06-9
CMF C57 H111 N21 O9 . x Br H

Absolute stereochemistry.



PAGE 1-A

PAGE 1-B

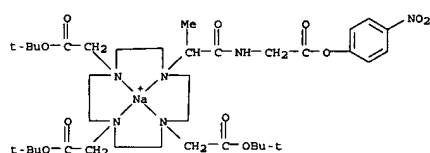


CM 2

CRN 192636-00-3
CMF C37 H60 N6 Na O11 . Br
CCI CCS
CDES 7:T-4

L17 ANSWER 11 OF 12 USPATFULL (Continued)

CCI CCS
CDES 7:T-4

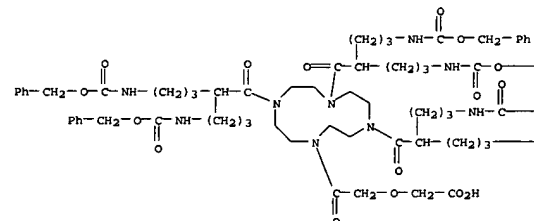
● Br⁻

RN 192636-25-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl)
10- [1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N'',N'''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and [2-oxo-2-[4,7,10-tris[1-oxo-5-[[[(phenylmethoxy)carbonyl]amino]-2-[3-[[[(phenylmethoxy)carbonyl]amino]propyl]pentyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI) (CA INDEX NAME)

CM 1

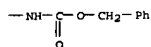
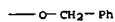
CRN 192636-23-0
CMF C84 H108 N10 O19

PAGE 1-A



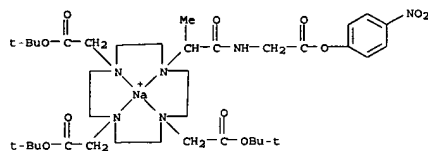
L17 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-B



CM 2

CRN 192636-00-3
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 CCI CCS
 CDES 7:T-4

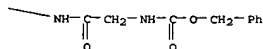
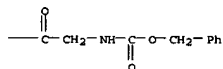
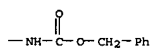
● Br⁻

CM 3

CRN 192635-87-3
 CMP C21 H39 N9 O3 . x Br H

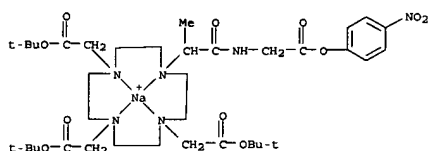
L17 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-B



CM 2

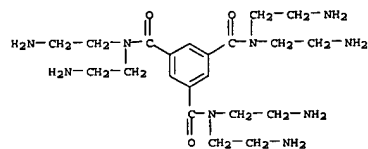
CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

● Br⁻

CM 3

CRN 192635-87-3
 CMP C21 H39 N9 O3 . x Br H

L17 ANSWER 11 OF 12 USPATFULL (Continued)



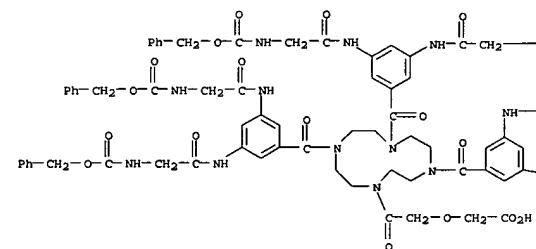
● x HBr

RN 192636-31-0 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl)
 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with
 N,N,N',N',N',N'-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and
 [2-oxo-2-[4,7,10-tris(3,5-bis[[[(phenylmethoxy)carbonyl]amino]acetyl]aminobenzoyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI) (CA INDEX NAME)

CM 1

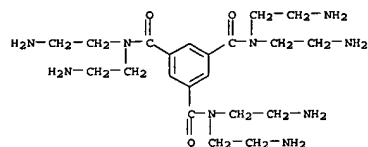
CRN 192636-29-6
 CMP C93 H96 N16 O25

PAGE 1-A



L17 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-B



● x HBr

L17 ANSWER 12 OF 12 USPATFULL
 ACCESSION NUMBER: 1998:124183 USPATFULL
 TITLE: Cascade polymer complexes, process for their
 production
 INVENTOR(S): and pharmaceutical agents containing said complexes
 Schmitt-Willich, Meribert, Berlin, Germany, Federal
 Republic of
 Platzeck, Johannes, Berlin, Germany, Federal Republic
 of
 Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Muhler, Andreas, Neuenhagen, Germany, Federal Republic
 of
 Frenzel, Thomas, Berlin, Germany, Federal Republic of
 Schering Aktiengesellschaft, Berlin, Germany, Federal
 Republic of (non-U.S. corporation)
 PATENT ASSIGNEE(S):
 NUMBER KIND DATE
 PATENT INFORMATION: US 5820849 19981013
 APPLICATION INFO.: US 1996-674844 19960703 (B)

NUMBER DATE
 PRIORITY INFORMATION: DE 1995-19525924 19950704
 DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Hollinden, Gary E.
 ASSISTANT EXAMINER: Hartley, Michael G.
 LEGAL REPRESENTATIVE: Millen, White, Zelano & Branigan, P.C.
 NUMBER OF CLAIMS: 14
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
 LINE COUNT: 2077
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Cascade polymer complexes that contain

a) complexing ligands of general formula I

A-[X-[Y-(Z-<W-K.sub.W>.sub.Z).sub.Y].sub.X].sub.A (I),

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity a,

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w,

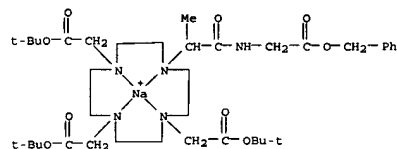
K stands for the radical of a complexing agent,

a stands for numbers 2 to 12,

x, y, z and w, independently of one another, stand for numbers 1 to 4,

L17 ANSWER 12 OF 12 USPATFULL (Continued)
 provided that at least two reproduction units are different and that
 for the product of the multiplicities,
 $16 < a \cdot \text{multidot} \cdot x \cdot \text{multidot} \cdot y \cdot \text{multidot} \cdot z \cdot \text{multidot} \cdot w < 64$
 holds true,
 b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42,
 44 or 57-83,
 c) optionally cations of inorganic and/or organic bases, amino acids or
 amino acid amides as well as
 d) optionally acylated terminal amino groups
 are valuable compounds for diagnosis and therapy.

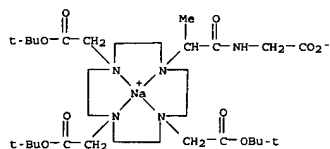
IT 186095-26-1P 186095-27-2P 186095-30-7P
 186095-31-8P 186095-35-2P 186095-36-3P
 (prepn. of cascade polymer complexes as medical contrast media)
 RN 186095-26-1 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl]amino)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)



● Br⁻

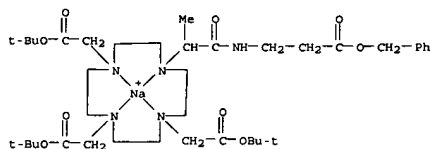
RN 186095-27-2 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 12 OF 12 USPATFULL (Continued)



● HBr

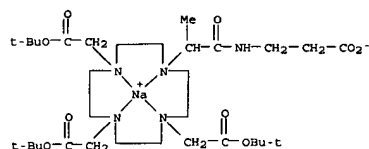
RN 186095-30-7 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[(3-oxo-3-(phenylmethoxy)propyl]amino)ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)



● Br⁻

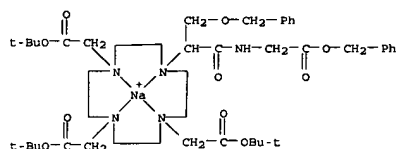
RN 186095-31-8 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 12 OF 12 USPATFULL (Continued)



● HBr

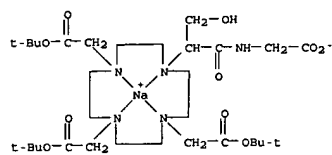
RN 186095-35-2 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl]amino)-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)



● Br⁻

RN 186095-36-3 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

L17 ANSWER 12 OF 12 USPTAFULL (Continued)



● HBr

<C

09/405,046

Page 33

=> s l12 and (peptide?)

L18 247 L12 AND (PEPTIDE?)

=> s l18 and (proteas?)

L19 23 L18 AND (PROTEAS?)

=> dup rem l19

PROCESSING COMPLETED FOR L19

L20 23 DUP REM L19 (0 DUPLICATES REMOVED)

=> s l19 not l17

L21 23 L19 NOT L17

=> s l17 not l19

L22 12 L17 NOT L19

=> dup rem l22

PROCESSING COMPLETED FOR L22

L23 12 DUP REM L22 (0 DUPLICATES REMOVED)

=> d ibib ab hitstr 1-

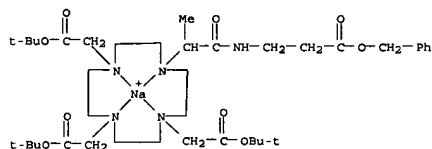
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L23 ANSWER 1 OF 12 USPATFULL
ACCESSION NUMBER: 2002:329422 USPATFULL
TITLE: Cascade polymer complexes, process for their production
INVENTOR(S): and pharmaceutical agents containing said complexes
Schmitt-Willich, Heribert, Berlin, GERMANY, FEDERAL REPUBLIC OF
Platzek, Johannes, Berlin, GERMANY, FEDERAL REPUBLIC OF
OF Raduchel, Bernd, Berlin, GERMANY, FEDERAL REPUBLIC OF
Muhler, Andreas, Neuenhagen, GERMANY, FEDERAL REPUBLIC OF
OF Frenzel, Thomas, Berlin, GERMANY, FEDERAL REPUBLIC OF
Scherer AG, Berlin, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): (non-U.S. corporation)

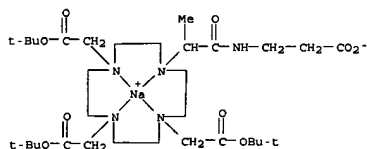
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PATENT INFORMATION:	US 2002187101	A1	20021212
APPLICATION INFO.:	US 2002-138651	A1	20020506 (10)
RELATED APPL. INFO.:	Division of Ser. No. US 2000-620989, filed on 20 Jul 2000, GRANTED, Pat. No. US 6426059		Division of Ser. No. US 6177060
No.	US 1998-44254, filed on 19 Mar 1998, GRANTED, Pat. No. US 6177060		Division of Ser. No. US 1996-674844, filed on 3 Jul 1996, GRANTED, Pat. No. US 5820849

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	2106	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
AB	Cascade polymer complexes with at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, useful NMR or x-ray lymphography imaging.	
IT	186095-26-1P 186095-27-2P 186095-30-7P 186095-31-8P 186095-35-2P 186095-36-3P (prepn. of cascade polymer complexes as medical contrast media)	
RN	186095-26-1 USPATFULL	
CN	Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)	

L23 ANSWER 1 OF 12 USPATFULL (Continued)

● Br⁻

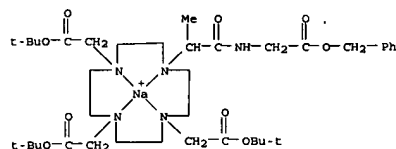
RN 186095-31-8 USPATFULL
CN Sodium(1+), [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[2-carboxyethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



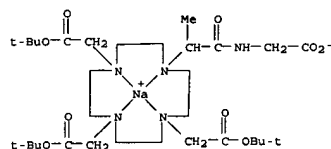
● HBr

RN 186095-35-2 USPATFULL
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L23 ANSWER 1 OF 12 USPATFULL (Continued)

● Br⁻

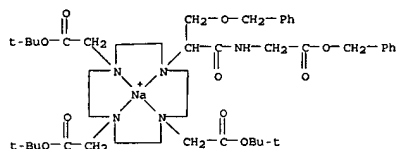
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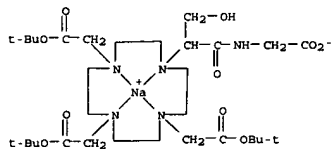
● HBr

RN 186095-30-7 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 1 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-36-3 USPATFULL
CN Sodium(1+), [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[2-carboxyethyl]amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

L23 ANSWER 2 OF 12 USPATFULL
 ACCESSION NUMBER: 2002:188111 USPATFULL
 TITLE: Cascade polymer complexes, process for their production
 INVENTOR(S): and pharmaceutical agents containing said complexes
 Schmitt-Willich, Heribert, Gorrestrasse 20, D-12161 Berlin, GERMANY, FEDERAL REPUBLIC OF
 Platzeck, Johannes, Grottkauer Str. 55, D-12621 Berlin, GERMANY, FEDERAL REPUBLIC OF
 Raduchel, Bernd, Gollanczstrasse 132, D-13465 Berlin, GERMANY, FEDERAL REPUBLIC OF
 Mühler, Andreas, Fontanestrasse 21A, D-15366 Neuenhagen, GERMANY, FEDERAL REPUBLIC OF
 Frenzel, Thomas, Paul-Schneider-Strasse 41, D-12247 Berlin, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6426059	B1	20020730
APPLICATION INFO.:	US 2000-620989		20000720 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-44254, filed on 19 Mar 1998, now patented, Pat. No. US 6177060 Division of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Hartley, Michael G.	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	1946	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cascade polymer complexes with at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, useful NMR or x-ray lymphography imaging.

IT 186095-26-1P 186095-27-2P 186095-30-7P

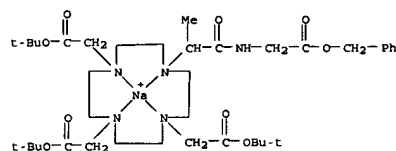
186095-31-8P 186095-35-2P 186095-36-3P

(prepn. of cascade polymer complexes as medical contrast media)

RN 186095-26-1 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

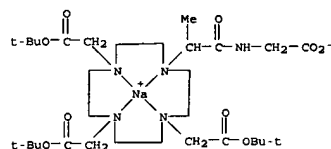
L23 ANSWER 2 OF 12 USPATFULL (Continued)



● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

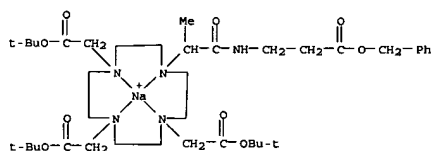


● HBr

RN 186095-30-7 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

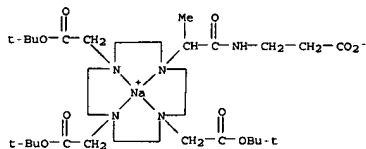
L23 ANSWER 2 OF 12 USPATFULL (Continued)



● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

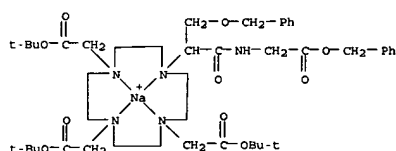


● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

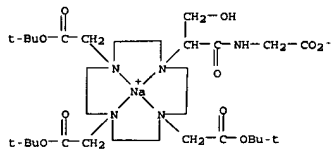
L23 ANSWER 2 OF 12 USPATFULL (Continued)



● Br⁻

RN 186095-36-3 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:417174 CAPLUS
DOCUMENT NUMBER: 137:151859
TITLE: Modification of the Structure of a Metallopeptide:
Synthesis and Biological Evaluation of 111In-Labeled
DOTA-Conjugated Rhenium-Cyclized .alpha.-MSH

Analogues
AUTHOR(S): Cheng, Zhen; Chen, Jiangqing; Miao, Yubin; Owen,
Nellie

CORPORATE SOURCE: Department of Chemistry, University of Missouri-Columbia, Columbia, MO, 65211, USA

SOURCE: Journal of Medicinal Chemistry (2002), 45(1)

3048-3056
CODEN: JMCMAR ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rhenium-cyclized ReCMSh analogs are novel melanoma-targeting metallopeptides with high tumor uptake, long tumor retention, and low background in normal tissues, which make these metallopeptides an ideal structural motif for designing novel melanoma-targeting agents. ReCMSh has been derivatized with a 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid (DOTA) chelate so that it can be labeled with a wide variety of radionuclides for imaging and therapeutic applications. This study involved optimization of the *in vivo* biol. properties of DOTA-ReCMSh (S), through modification of the structure of the metallopeptide. Several DOTA-ReCMSh analogs, Ac-Lys(DOTA)-ReCMSh (4) DOTA-ReCMSh(Arg11) (6), DOTA-ReCMSh-OH (8), and DOTA-ReCMSh-Asp-OH (11), were synthesized using solid phase peptide synthesis, followed by rhenium cyclization. The IC50 values of the metallopeptides were detd. through competitive binding assays against 125I-(Tyrr)-NDP. Radiolabeling of the DOTA-rhenium-cyclized peptides with 111In was carried out in NH4OAc (0.1 M; pH 5.5)-buffered soln. for 30 min at 70 °C. The stability of the radiolabeled complexes was evaluated in 0.01 M, pH 7.4, phosphate-buffered saline/0.1% bovine serum albumin soln. After sepn. of the radiolabeled peptide from the unlabeled peptide by reverse phase high-performance liq. chromatog., the biodistribution of the radiolabeled complex was performed in C57 mice bearing B16/F1 murine melanoma tumors. All radiolabeled complexes showed fast blood clearance (2 h postinjection (pi): 111In-S, 0.07 ± 0.03 % ID/g; 111In-4, 0.09 ± 0.06 % ID/g; 111In-6, 0.21 ± 0.08 % ID/g; 111In-8, 0.14 ± 0.10 % ID/g; and 111In-10, 0.05 ± 0.03 % ID/g) and their clearance was predominantly through the urine (4 h pi: 93.5 ± 1.7, 87.8 ± 6.5, 89.8 ± 4.2, 93.3 ± 1.1, and 93.8 ± 1.8 (% ID) for 111In-labeled S, 4, 6, 8, and 10, resp.). Tumor uptake values of 2.09 ± 0.90, 6.01 ± 2.36, 17.41 ± 5.61, 9.27 ± 0.68, and 7.32 ± 2.99 (% ID/g) for 111In-labeled S, 4, 6, 8, and 10, resp., were obsd. at 4 h pi. The kidney uptake was 9.27 ± 2.65 % ID/g for 111In-S, 19.02 ± 2.63 % ID/g for 111In-4, 7.37 ± 1.13 % ID/g for 111In-6, 8.70 ± 0.88 % ID/g for 111In-8, and 1.47 ± 0.47 % ID/g for 111In-10 at 4 h pi. Complex 6 showed high melanoma uptake and lower kidney uptake than the corresponding Lys11 analogs, supporting 6 for further investigations as a potential therapeutic radiopharmaceutical.

L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

IT 445235-02-9P
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis and melanoma uptake of ¹¹¹In-labeled DOTA-conjugated
rhenium-cyclized .alpha.-MSH analogs)

rhodium-cyclized
RN 445235-02-9 CAPLUS

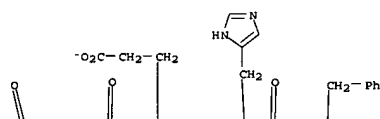
CN Indate(4-)-111In, oxo[N-[[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-cysteinyl]-L-cysteinyl-

.kappa.N, .kappa.S-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-tryptophyl-L-cysteinyll-.kappa.S-L-lysyl-L-prolyl-L-valinamido(8)-], tetrahydrogen (9C1) (CA INDEX NAME)

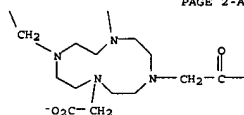
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L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

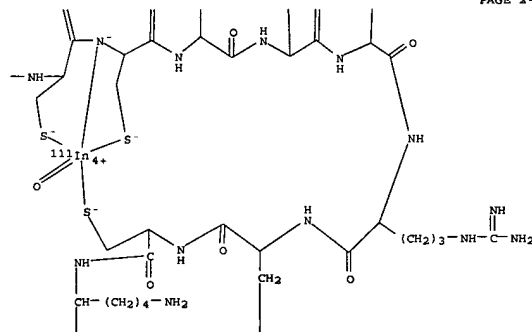


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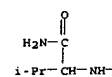


L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

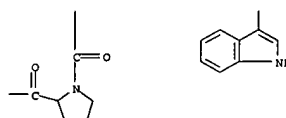
PAGE 2-B



PAGE 3-A

 $\bullet_4 \text{H}^+$

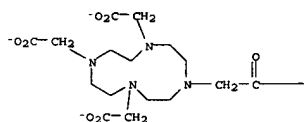
PAGE 3-B



IT 445234-99-1P 445235-00-7P 445235-01-0P

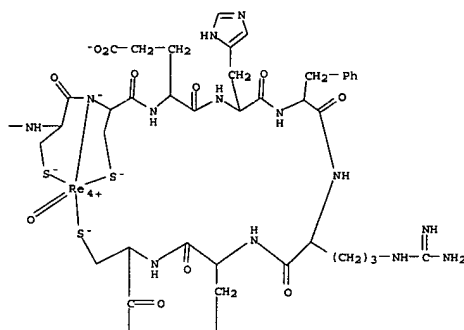
L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)
RL: BSU (Biological study, unclassified); PRP (Properties); RCT
(Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent)
(synthesis and melanoma uptake of ¹¹¹In-labeled DOTA-conjugated
rhenium-cyclized .alpha.-MSH analogs)
RN 445234-99-1 CAPLUS
CN Rhenate(4-), oxo[N-[[[4,7,10-tris(carboxymethyl)-1,4,7,10-
tetraazacyclododec-1-yl]acetyl]-L-cysteiny]-.kappa.S-L-cysteiny]-
.kappa.N,.kappa.S-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-
tryptophyl-L-cysteiny]-.kappa.S-L-arginyl-L-prolyl-L-valinamidato(8-)]-,
tetrahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

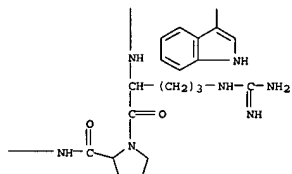


PAGE 2-A

● 4 H⁺

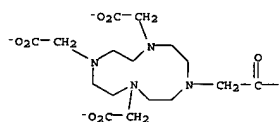
L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



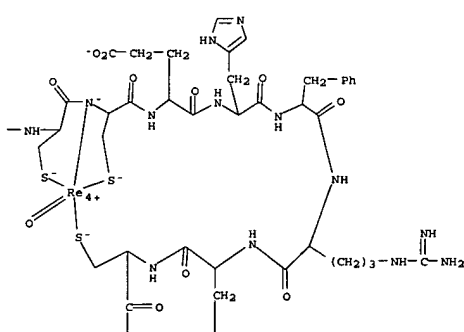
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.kappa.N,.kappa.S-L-.alpha.-glutamyl-L-histidyl-D-phenylalanyl-L-arginyl-L-
tryptophyl-L-cysteiny]-.kappa.S-L-lysyl-L-prolyl-L-valinato(9-)]-,
pentahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



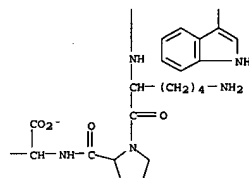
PAGE 2-A

i-Pr-

● 5 H⁺

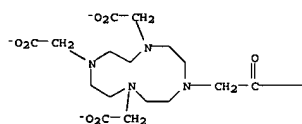
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PAGE 2-B

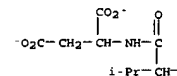


RN 445235-01-8 CAPLUS
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PAGE 1-A

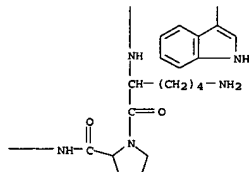


PAGE 2-A

● 6 H⁺

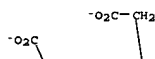
L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



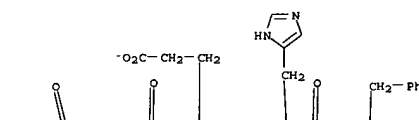
IT 445235-03-0P 445235-04-1P 445235-05-2P
 445241-14-5P
 RL: DGN (Diagnostic use); PKT (Pharmacokinetics); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (synthesis and melanoma uptake of 111In-labeled DOTA-conjugated rhenium-cyclized .alpha.-MSH analogs)
 RN 445235-03-0 CAPLUS
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PAGE 1-A

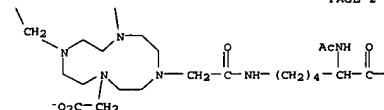


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PAGE 1-B

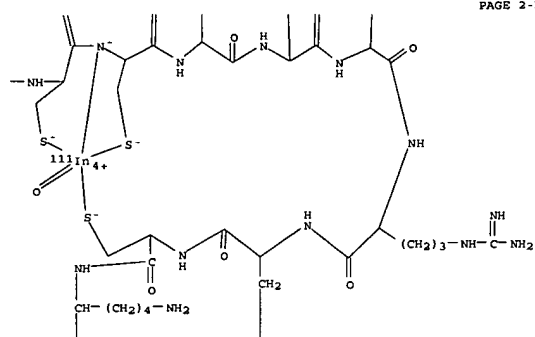


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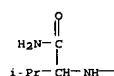


L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B

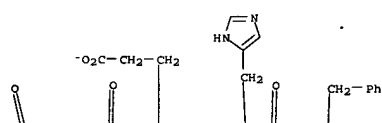


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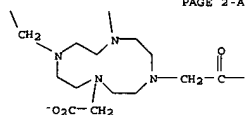
● 4 H⁺

L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

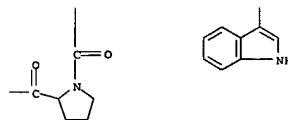


PAGE 2-A

● 5 H⁺

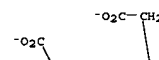
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PAGE 3-B



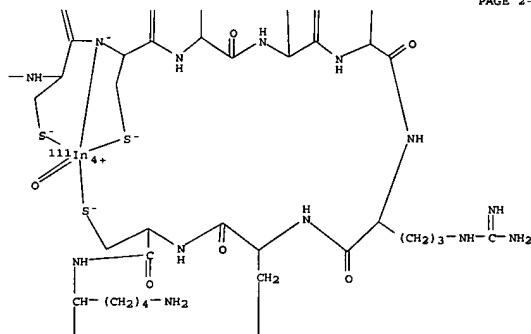
RN 445235-04-1 CAPLUS
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PAGE 1-A

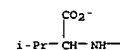


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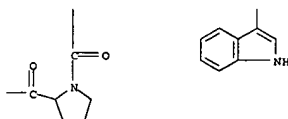
PAGE 2-B



PAGE 3-A



PAGE 3-B



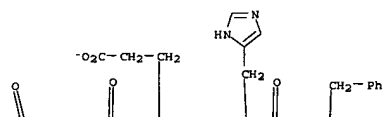
RN 445235-05-2 CAPLUS

L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)
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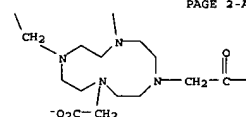
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L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

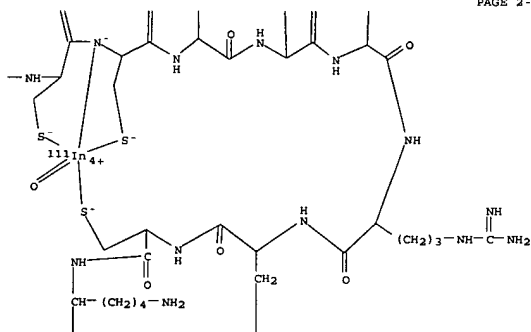


PAGE 2-A

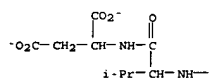


L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

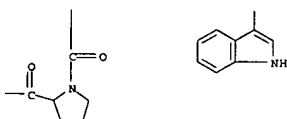
PAGE 2-B



PAGE 3-A

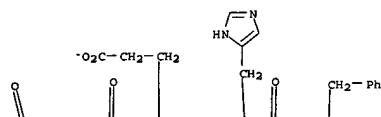
● 6 H⁺

PAGE 3-B

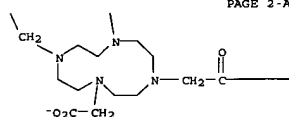


L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

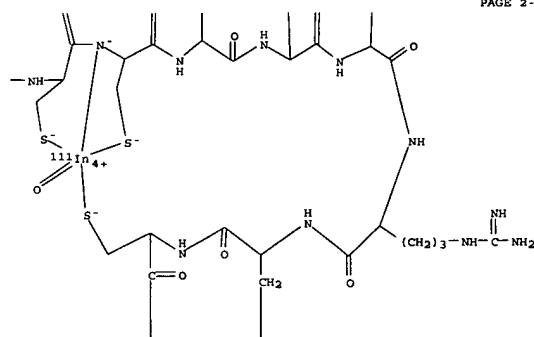


PAGE 2-A



L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-B



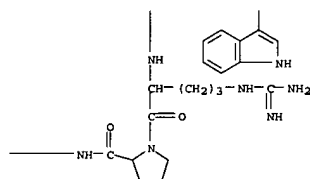
PAGE 3-A



●4 H⁺

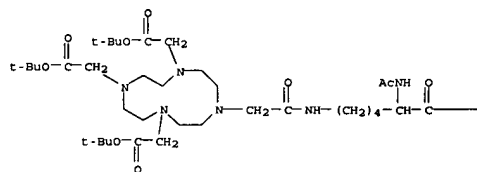
L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 3-B



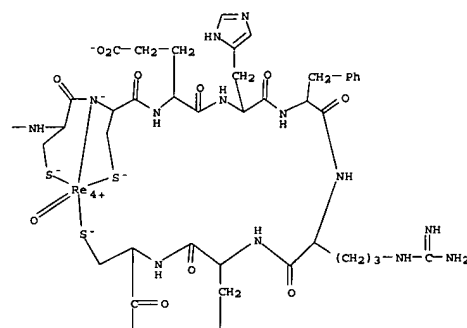
IT 445234-97-9P 445234-98-0P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
 (Preparation); RACT (Reactant or reagent)
 (synthesis and melanoma uptake of 111In-labeled DOTA-conjugated
 rhenium-cyclized .alpha.-MSH analogs)
 RN 445234-97-9 CAPLUS
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PAGE 1-A



L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



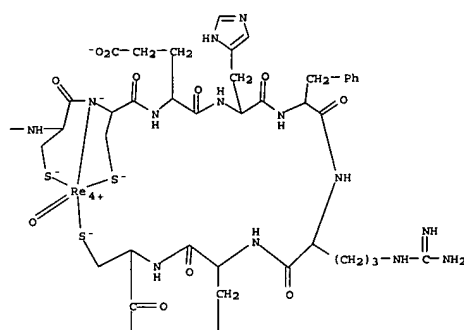
PAGE 2-A



● H⁺

L23 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



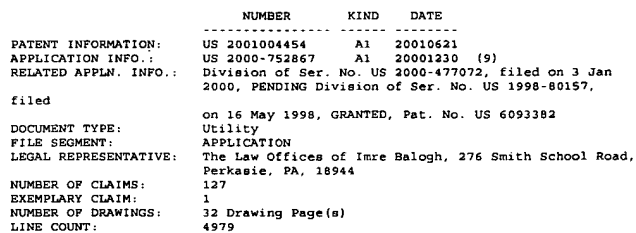
PAGE 1-A

PAGE 2-A

 $\bullet_4 \text{H}^+$

L23 ANSWER 4 OF 12 USPATFULL

ACCESSION NUMBER: 2001:95281 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR: Wedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainsboro, NJ, United States
Ramalingam, Kondareddi, Dayton, NJ, United States
Linder, Karen E., Kingston, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Weedle, Michael F., Princeton, NJ, United States



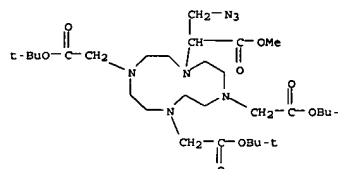
CA INDEXING IS AVAILABLE FOR THIS PATENT.

AB 251084-67-09 The following are the chemical compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or .beta. isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-67-09 (reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-67-01 USPATAFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetracarboxylic acid.
alpha., (azacyclododecyl)-, alpha., alpha., alpha., -tris(1,1-dimethylethyl)-, alpha., -methyl ester (9CI) (CA INDEX NAME)



L23 ANSWER 4 OF 12 USPATFULL (Continued)

L23 ANSWER 5 OF 12 USPATFULL

ACCESSION NUMBER: 2001:59359 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainsboro, NJ, United States
Ramalingam, Kondareddiar, Dayton, NJ, United States
Linder, Karen E., Kingston, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Tweedle, Michael F., Princeton, NJ, United States
PATENT ASSIGNEE(S): Bracco Research USA, Inc., Princeton, NJ, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6221334	B1	20010424
APPLICATION INFO.:	US 2000-477072		20000103 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-80157, filed on 16 May 1998, now patented, Pat. No. US 6093382		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, Dameron L.		
LEGAL REPRESENTATIVE:	Balogh, Imre		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	31 Drawing Figure(s); 31 Drawing Page(s)		
LINE COUNT:	3407		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

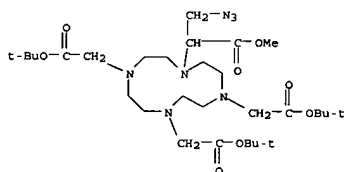
AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-67-0P (reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-67-0 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, .alpha.-(azidomethyl)-, .alpha.', .alpha.', .alpha.''-tris(1,1-dimethylethyl) .alpha.-methyl ester (9CI) (CA INDEX NAME)

L23 ANSWER 5 OF 12 USPATFULL (Continued)



L23 ANSWER 6 OF 12 USPATFULL

ACCESSION NUMBER: 2001:10522 USPATFULL
TITLE: Cascade polymer complexes, process for their production and pharmaceutical agents containing said complexes
INVENTOR(S): Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
Platzek, Johannes, Berlin, Germany, Federal Republic of
of Raduchel, Bernd, Berlin, Germany, Federal Republic of
Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
Frenzel, Thomas, Berlin, Germany, Federal Republic of
Schering Aktiengesellschaft, Berlin, Germany, Federal Republic of (non-U.S. corporation)
PATENT ASSIGNEE(S):

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6177060	B1	20010123
APPLICATION INFO.:	US 1998-44254		19980319 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelano & Branigan, P.C.	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	1880	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

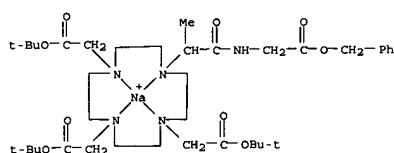
AB Cascade polymer complexes with at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, useful NMR or X-ray lymphography imaging.

IT 186095-26-1P 186095-27-2P 186095-30-7P
186095-31-8P 186095-35-2P 186095-36-3P
(prepn. of cascade polymer complexes as medical contrast media)

RN 186095-26-1 USPATFULL

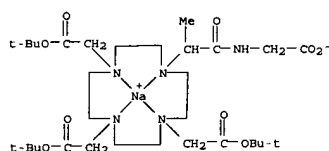
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-trisacetate-kappa.N1, kappa.N4, kappa.N7, kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 6 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

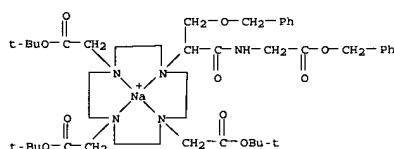


● HBr

RN 186095-30-7 USPATFULL

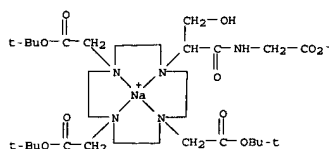
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 6 OF 12 USPATFULL (Continued)

● Br⁻

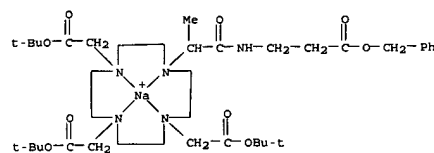
RN 186095-36-3 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



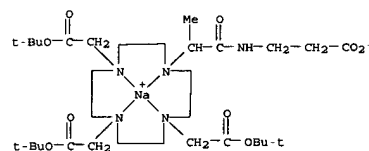
● HBr

L23 ANSWER 6 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)



● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 7 OF 12 USPATFULL

ACCESSION NUMBER: 2000:174826 USPATFULL
 TITLE: Cascade polymer complexes, process for their production
 INVENTOR(S): and pharmaceutical agents containing said complexes
 Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
 Platzek, Johannes, Berlin, Germany, Federal Republic of
 of Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
 Frenzel, Thomas, Berlin, Germany, Federal Republic of
 Schering Aktiengesellschaft, Germany, Federal Republic of
 PATENT ASSIGNEE(S): (non-U.S. corporation)

NUMBER	KIND	DATE
US 6166200		20001226
APPLICATION INFO.:	US 1999-345807	19990702 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-44254, filed on 19 Mar 1998 which is a division of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849	

NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924 19950704
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Dees, Jose' G.
ASSISTANT EXAMINER:	Hartley, Michael G.
LEGAL REPRESENTATIVE:	Millen, White, Zelano, & Branigan, P.C.
NUMBER OF CLAIMS:	10
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	1904
CAS INDEXING IS AVAILABLE FOR THIS PATENT.	
AB	Cascade polymer complexes that contain

a) complexing ligands of general formula I

A--{X--[Y--(Z--W--K.sub.W .sub.z).sub.y].sub.x}.sub.a (1),

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity a,

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w,

K stands for the radical of a complexing agent,

a stands for numbers 2 to 12,

x, y, z and w, independently of one another, stand for numbers 1 to 4,

provides that at least two reproduction units are different and that for

L23 ANSWER 7 OF 12 USPATFULL (Continued)
the product of the multiplicities,

16.ltoreq.a.multidot.x.multidot.y.multidot.z.multidot.w.ltoreq.64

holds true,

44 b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42,
or 57-83,

c) optionally cations of inorganic and/or organic bases, amino acids or amino acid amides as well as

d) optionally acylated terminal amino groups are valuable compounds for diagnosis and therapy.

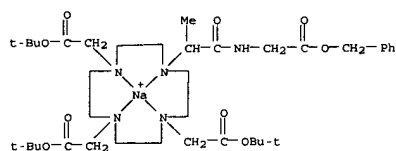
IT 186095-26-1P 186095-27-2P 186095-30-7P

186095-31-8P 186095-35-2P 186095-36-3P

(prepn. of cascade polymer complexes as medical contrast media)

RN 186095-26-1 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

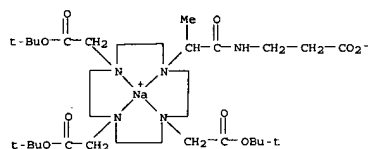


● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[[carboxymethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

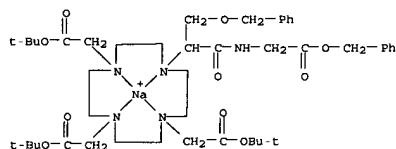
L23 ANSWER 7 OF 12 USPATFULL (Continued)



● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]-1-[[[phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

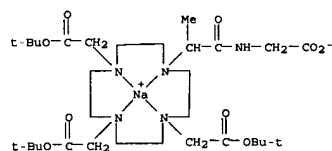


● Br⁻

RN 186095-36-3 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[[carboxymethyl]amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

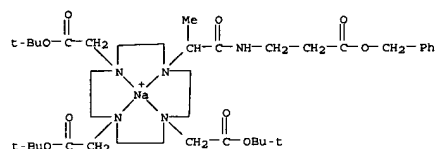
L23 ANSWER 7 OF 12 USPATFULL (Continued)



● HBr

RN 186095-30-7 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

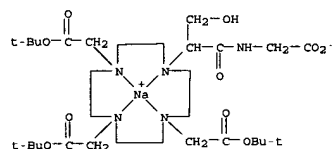


● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[[[2-carboxyethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 7 OF 12 USPATFULL (Continued)



● HBr

L23 ANSWER 8 OF 12 USPATFULL
ACCESSION NUMBER: 2000:94681 USPATFULL
TITLE: Metal complexes derivatized with folate for use in diagnostic and therapeutic applications
INVENTOR(S): Wedeking, Paul W., Pennington, NJ, United States
Wager, Ruth E., Rockville, MD, United States
Arunachalam, Thangavel, Plainsboro, NJ, United States
Ramalingam, Kondareddi, Dayton, NJ, United States
Linder, Karen E., Kingdon, NJ, United States
Ranganathan, Ramachandran S., Princeton, NJ, United States
Nunn, Adrian D., Lambertville, NJ, United States
Raju, Natarajan, Kendall Park, NJ, United States
Tweedle, Michael F., Princeton, NJ, United States
PATENT ASSIGNEE(S): Bracco Research USA Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6093382		20000725
APPLICATION INFO.:	US 1998-80157		19980516 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Dees, Jose' G.		
ASSISTANT EXAMINER:	Jones, Dameron		
LEGAL REPRESENTATIVE:	Balogh, Imre		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 8 Drawing Page(s)		
LINE COUNT:	3756		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Diagnostic and therapeutic compositions in the form of complexes for enhancing transmembrane transport of a diagnostic or therapeutic agent and methods for their use. The complexes contain the .alpha., .gamma., or bis isomers of folate receptor-binding analogs of folate, a metal chelated by a ligand, and in one embodiment, a chemotherapeutic agent.

IT 251084-67-0P
(reactant for prepn. of metal complexes for use in diagnostic and therapeutic applications)

RN 251084-67-0 USPATFULL

CN 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetic acid, .alpha.-(azidomethyl)-, .alpha., .alpha., .alpha., .alpha.-tris(1,1-dimethylethyl) .alpha.-methyl ester (9CI) (CA INDEX NAME)

L23 ANSWER 9 OF 12 USPATFULL
ACCESSION NUMBER: 2000:61178 USPATFULL
TITLE: Cascade polymer complexes, process for their production
INVENTOR(S): and pharmaceutical agents containing said complexes
Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
Platzek, Johannes, Berlin, Germany, Federal Republic of
of Raduchel, Bernd, Berlin, Germany, Federal Republic of
Muhler, Andreas, Neuenhagen, Germany, Federal Republic of
Frenzel, Thomas, Berlin, Germany, Federal Republic of
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6063361		20000516
APPLICATION INFO.:	US 1998-40364		19980318 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-674844, filed on 3 Jul 1996, now patented, Pat. No. US 5820849		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19525924	19950704
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Dees, Jose' G.	
ASSISTANT EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelane & Branigan, P.C.	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	2098	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cascade polymer complexes having a complexing ligand with at least two different reproduction units and having a complexing agent which is a macrocyclic group having an amide grouping or a linear DTPA-type group having a linkage to the polymer through the central nitrogen.

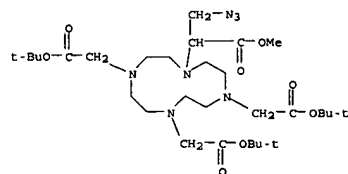
IT 186095-26-1P 186095-27-2P 186095-30-7P

186095-31-8P 186095-35-2P 186095-36-3P
(prepn. of cascade polymer complexes as medical contrast media)

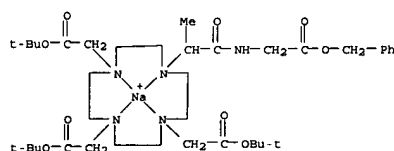
RN 186095-26-1 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[2-oxo-2-(phenylmethoxy)ethyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 8 OF 12 USPATFULL (Continued)



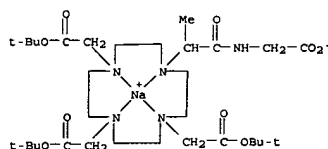
L23 ANSWER 9 OF 12 USPATFULL (Continued)



● Br⁻

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

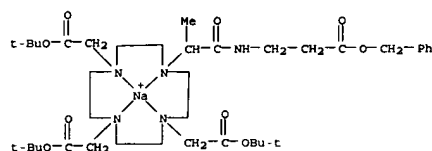


● HBr

RN 186095-30-7 USPATFULL

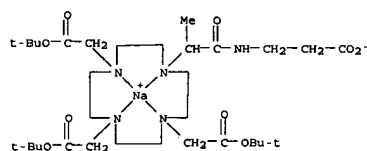
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[[3-oxo-3-(phenylmethoxy)propyl]amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 9 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-31-8 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(2-carboxyethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)- (9CI) (CA INDEX NAME)



● HBr

RN 186095-35-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl)amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-

tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA INDEX NAME)

L23 ANSWER 10 OF 12 USPATFULL

ACCESSION NUMBER: 2000:54202 USPATFULL
 TITLE: Cascade polymer complexes, process for producing the same and pharmaceuticals containing the same
 INVENTOR(S): Schmitt-Willich, Heribert, Berlin, Germany, Federal Republic of
 of Platzek, Johannes, Berlin, Germany, Federal Republic of
 of Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Weinmann, Hanno-Joachim, Berlin, Germany, Federal Republic of
 Ebert, Wolfgang, Berlin, Germany, Federal Republic of
 Misselwitz, Bernd, Berlin, Germany, Federal Republic of
 of Muhler, Andreas, Berlin, Germany, Federal Republic of
 Frenzel, Thomas, Berlin, Germany, Federal Republic of
 PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6057419		20000502
	WO 9723245		19970703
APPLICATION INFO.:	US 1998-77773		19980604 (9)
	WO 1996-EP5315		19961129
			19980604 PCT 371 date
			19980604 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19549286	19951222

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Truong, Duc
 LEGAL REPRESENTATIVE: Millen, White, Zelano, & Branigan, P.C.
 NUMBER OF CLAIMS: 9
 EXEMPLARY CLAIM: 1
 LINE COUNT: 2064

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cascade polymer complexes that contain a) complexing ligands of general formula (I), in which A stands for a nitrogen-containing cascade nucleus

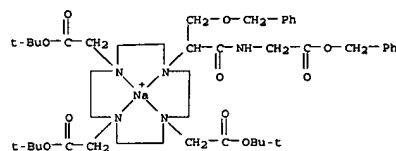
of base multiplicity a, X and Y, independently of one another, stand

for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y, z and w, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w, X stands for the radical of a complexing agent, a stands for numbers 2 to 12, x, y, z and w, independently of one another, stand for numbers 1 to 4, provided that at least two reproduction units are different, and that 16.ltoreq.a.multidot.x.multidot.y.multidot.z.multidot.w.ltoreq.64 holds true for the product of the multiplicities and that at least one of cascade reproduction units X, Y, Z, W stands for a 1,4,7,10-

tetraazacyclododecane or 1,4,8,11-tetraazacyclotetradecane reproduction unit, b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83, c) optionally cations of inorganic and/or organic bases, amino acids or amino acid amides as well as d) optionally acylated terminal amino groups are valuable compounds for diagnosis and therapy.

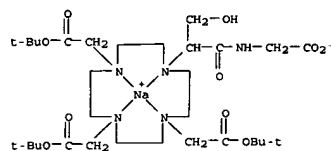
IT 186095-27-2P 192635-90-8P 192635-91-9P
 192635-96-4P 192636-00-3P

L23 ANSWER 9 OF 12 USPATFULL (Continued)

● Br⁻

RN 186095-36-3 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)- (9CI) (CA INDEX NAME)



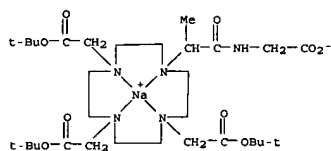
● HBr

L23 ANSWER 10 OF 12 USPATFULL (Continued)

(cascade polymer precursor; nitrogen-contg. cascade polymer transition metal complexes and their manuf. and use in pharmaceuticals and diagnostic agents)

RN 186095-27-2 USPATFULL

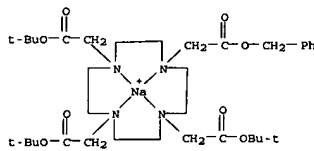
CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)- (9CI) (CA INDEX NAME)



● HBr

RN 192635-90-8 USPATFULL

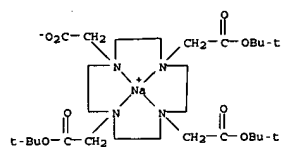
CN Sodium(1+), [tris(1,1-dimethylethyl) phenylmethyl 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA INDEX NAME)

● Br⁻

RN 192635-91-9 USPATFULL

CN Sodium, [tris(1,1-dimethylethyl) 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)- (9CI) (CA INDEX NAME)

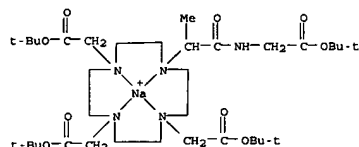
L23 ANSWER 10 OF 12 USPATFULL (Continued)



● HBr

RN 192635-96-4 USPATFULL

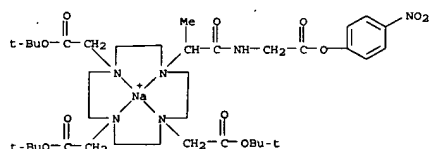
CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-[[2-(1,1-dimethylethoxy)-2-oxoethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA INDEX NAME)

● Br⁻

RN 192636-00-3 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA INDEX NAME)

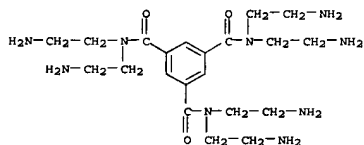
L23 ANSWER 10 OF 12 USPATFULL (Continued)

● Br⁻

CM 2

CRN 192635-87-3

CMF C21 H39 N9 O3 . x Br H



● x HBr

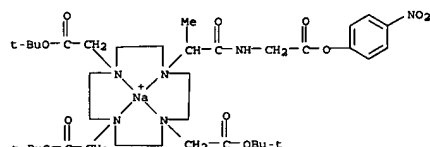
CM 3

CRN 192635-86-2

CMF C84 H99 N11 O21

Absolute stereochemistry.

L23 ANSWER 10 OF 12 USPATFULL (Continued)

● Br⁻

IT 192636-01-4DP, gadolinium complexes 192636-09-2DP, gadolinium complexes 192636-17-2DP, gadolinium complexes 192636-25-2DP, gadolinium complexes 192636-31-0DP, gadolinium complexes

(nitrogen-contg. cascade polymer transition metal complexes and their manuf. and use in pharmaceuticals and diagnostic agents)

RN 192636-01-4 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)

10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with

N,N,N',N',N'',N''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and 4-nitrophenyl [2-oxo-2-(4,7,10-tris[(2S)-1-oxo-2,6-

bis[(phenylmethoxy)carbonyl]amino]hexyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetate (9CI) (CA INDEX NAME)

CM 1

CRN 192636-00-3

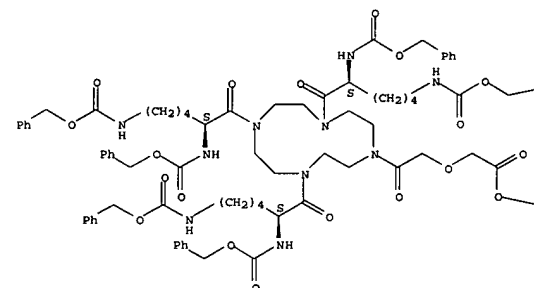
CMF C37 H60 N6 Na O11 . Br

CCI CCS

CDES 7:T-4

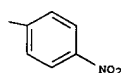
L23 ANSWER 10 OF 12 USPATFULL (Continued)

PAGE 1-A



PAGE 1-B

— Ph



RN 192636-09-2 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)

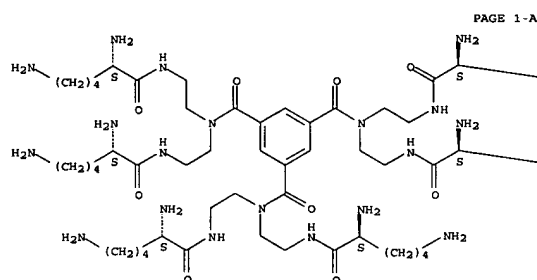
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N'',N''-hexakis[2-[[[(2S)-2,6-diamino-1-oxohexyl]amino]ethyl]-1,3,5-benzenetricarboxamide hydrobromide (9CI) (CA INDEX NAME)

CM 1

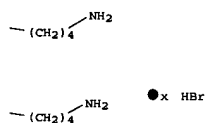
L23 ANSWER 10 OF 12 USPATFULL (Continued)

CRN 192636-06-9
 CMP C57 H111 N21 O9 . x Br H

Absolute stereochemistry.



PAGE 1-B

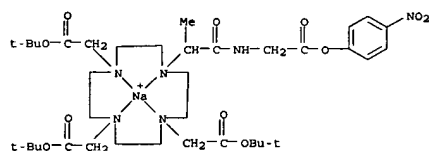


CM 2

CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

L23 ANSWER 10 OF 12 USPATFULL (Continued)

CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

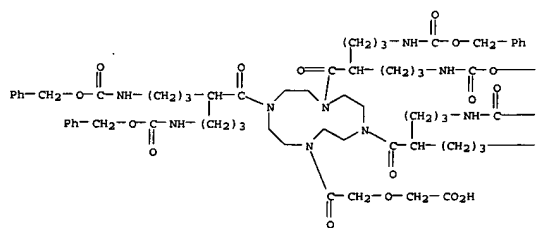
● Br⁻

RN 192636-25-2 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl)
 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with N,N,N',N',N',N'-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and [2-oxo-2-[4,7,10-tris[1-oxo-5-[[[(phenylmethoxy)carbonyl]amino]-2-(3-[[[(phenylmethoxy)carbonyl]amino]propyl]pentyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI) (CA INDEX NAME)

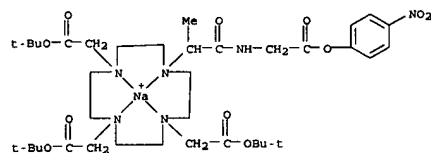
CM 1

CRN 192636-23-0
 CMP C84 H108 N10 O19

PAGE 1-A



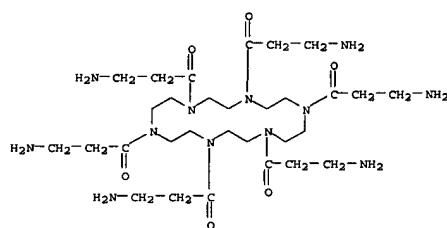
L23 ANSWER 10 OF 12 USPATFULL (Continued)

● Br⁻

RN 192636-17-2 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl)
 10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with 1,4,7,10,13,16-hexakis(3-amino-1-oxopropyl)-1,4,7,10,13,16-hexaazacyclooctadecane hydrobromide (9CI) (CA INDEX NAME)

CM 1

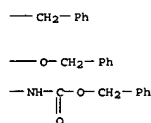
CRN 192636-15-0
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● x HBr

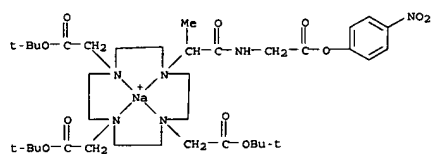
CM 2

L23 ANSWER 10 OF 12 USPATFULL (Continued)



CM 2

CRN 192636-00-3
 CMP C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

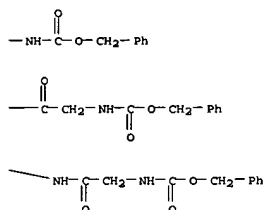
● Br⁻

CM 3

CRN 192635-87-3
 CMP C21 H39 N9 O3 . x Br H

PAGE 1-B

L23 ANSWER 10 OF 12 USPATFULL (Continued)



●_x HB_x

CM 2

CRN 192636-00-3

CMF C37 H60 N6 Na O11 . Br

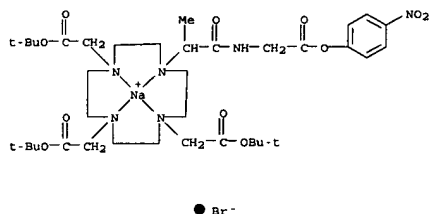
CCI CCS

CDES 7:T-4

CM 3

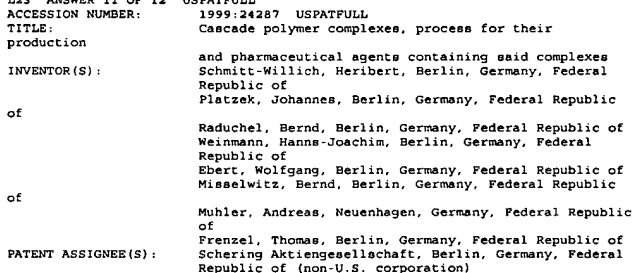
CRN 192635-87-3

CMF C21 H39 N9 O3 . x Br H



PAGE 1-A

L23 ANSWER 11 OF 12 USPATFULL



●x HBr

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5874061		19990223
APPLICATION INFO.:	US 1996-777666		19961220 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1995-19549286	19951222
	US 1996-9619P	19960105 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Deo, Jose G.	
ASSISTANT EXAMINER:	Hartley, Michael G.	
LEGAL REPRESENTATIVE:	Millen, White, Zelano, & Branigan, P.C.	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	2261	
CLAIMING IS AVAILABLE FOR THIS PATENT		

AB Cascade polymer complexes that contain

a) complexing ligands of general formula I

$$A_{-} = \{Y_{-}, [Y_{-}, (Z_{-}, (W_{-}, K \text{ sub } w) \text{ sub } z) \text{ sub } v) \text{ sub } x\} \text{ sub } a \quad (I)$$

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity A .

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w.

K stands for the radical of a complexing agent, a stands for numbers 2 to 12, x, y, z and w, independently of one another, stand for numbers 1 to 4.

L23 ANSWER 11 OF 12 USPATFULL (Continued)
provided that at least two reproduction units are different, that
16.ltoreq.a.multidot.x.multidot.y.multidot.z.multidot.w.ltoreq.64 holds
true for the product of the multiplicities, and that at least one of
cascade reproduction units X, Y, Z, W stands for a 1,4,7,10-
tetraazacyclododecane or 1,4,8,11-tetraazacyclotetradecane reproduction
unit,

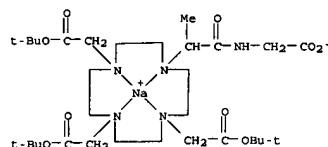
- 44 b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42,
or 57-83,
c) optionally cations of inorganic and/or organic bases, amino acids or
amino acid amides as well as
d) optionally acylated terminal amino groups are valuable compounds for
diagnosis and therapy.

IT 186095-27-2P 192635-90-8P 192635-91-9P
192635-96-4P 192636-00-3P

(cascade polymer precursor; nitrogen-contg. cascade polymer transition
metal complexes and their manuf. and use in pharmaceuticals and
diagnostic agents)

RN 186095-27-2 USPATFULL

CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-
methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato-
.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-
(9CI) (CA INDEX NAME)

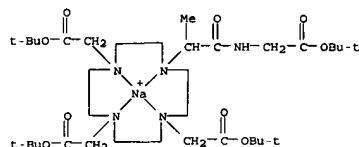


● HBr

RN 192635-90-8 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) phenylmethyl 1,4,7,10-
tetraazacyclododecane-1,4,7,10-tetraacetato-
.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)- (9CI) (CA
INDEX NAME)

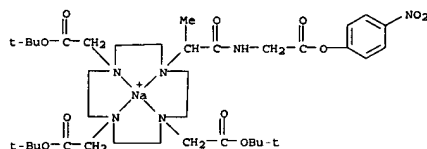
L23 ANSWER 11 OF 12 USPATFULL (Continued)



● Br⁻

RN 192636-00-3 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-
(9CI) (CA INDEX NAME)



● Br⁻

IT 192636-01-4DP, gadolinium complexes 192636-09-2DP,

gadolinium complexes 192636-17-2DP, gadolinium complexes

192636-25-2DP, gadolinium complexes 192636-31-0DP,

gadolinium complexes

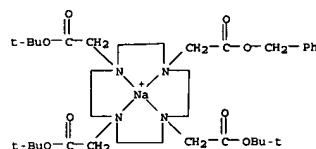
(nitrogen-contg. cascade polymer transition metal complexes and their
manuf. and use in pharmaceuticals and diagnostic agents)

RN 192636-01-4 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl)
10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer
with
N,N',N'',N''',N''',N''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide
hydrobromide and 4-nitrophenyl [2-oxo-2-[4,7,10-tris[(2S)-1-oxo-2,6-

bis[[[(phenylmethoxy)carbonyl]amino]hexyl]-1,4,7,10-tetraazacyclododec-1-
yl]ethoxy]acetate (9CI) (CA INDEX NAME)

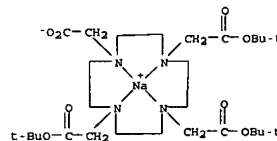
L23 ANSWER 11 OF 12 USPATFULL (Continued)



● Br⁻

RN 192635-91-9 USPATFULL

CN Sodium, [tris(1,1-dimethylethyl) 1,4,7,10-tetraazacyclododecane-1,4,7,10-
tetraacetato-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)- (9CI) (CA INDEX NAME)



● HBr

RN 192635-96-4 USPATFULL

CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-[[2-(1,1-dimethylethoxy)-2-
oxoethyl]amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-
1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide,
(T-4)- (9CI) (CA INDEX NAME)

L23 ANSWER 11 OF 12 USPATFULL (Continued)

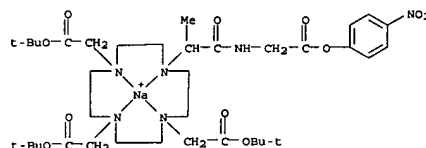
CM 1

CRN 192636-00-3

CMF C37 H60 N6 Na O11 . Br

CCI CCS

CDES 7:T-4

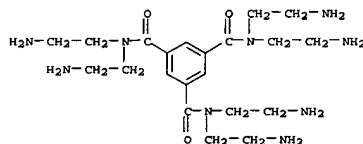


● Br⁻

CM 2

CRN 192635-87-3

CMF C21 H39 N9 O3 . x Br H



● x HBr

CM 3

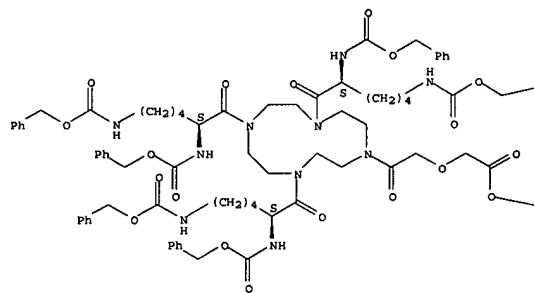
CRN 192635-86-2

CMF C84 H99 N11 O21

Absolute stereochemistry.

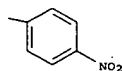
L23 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-A



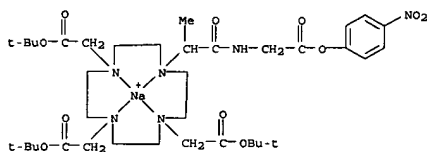
PAGE 1-B

Ph



RN 192636-09-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl)
10- [1-methyl-2- [[2- (4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer
with N,N,N',N',N'',N''-hexakis[2-[[[2,6-diamino-1-

L23 ANSWER 11 OF 12 USPATFULL (Continued)

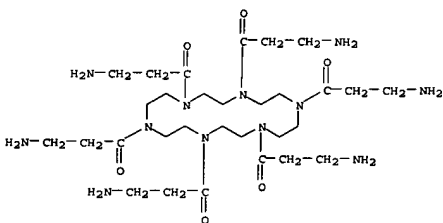


Br⁻

RN 192636-17-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl)
10- [1-methyl-2- [[2- (4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer
with 1,4,7,10,13,16-hexakis[3-amino-1-oxopropyl]-1,4,7,10,13,16-
hexaazacyclooctadecane hydrobromide (9CI) (CA INDEX NAME)

CM 1

CRN 192636-15-0
CMF C30 H60 N12 O6 . x Br H



x HBr

CM 2

CRN 192636-00-3
CMF C37 H60 N6 Na O11 . Br

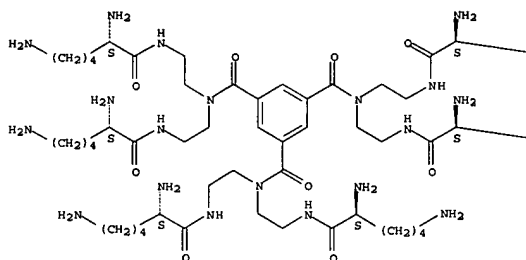
L23 ANSWER 11 OF 12 USPATFULL (Continued)
oxohexyl]amino]ethyl]-1,3,5-benzenetricarboxamide hydrobromide (9CI)
(CA INDEX NAME)

CM 1

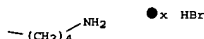
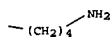
CRN 192636-06-9
CMF C57 H111 N21 O9 . x Br H

Absolute stereochemistry.

PAGE 1-A



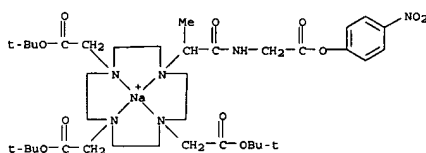
PAGE 1-B



CM 2

CRN 192636-00-3
CMF C37 H60 N6 Na O11 . Br
CCI CCS
CDES 7:T-4

L23 ANSWER 11 OF 12 USPATFULL (Continued)
CCI CCS
CDES 7:T-4



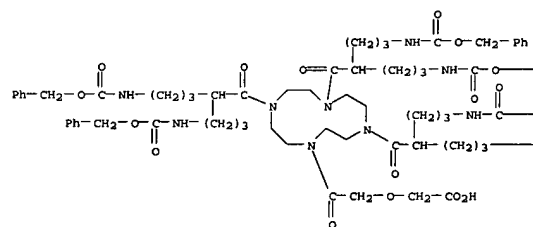
Br⁻

RN 192636-25-2 USPATFULL
CN Sodium(1+), [tris(1,1-dimethylethyl)
10- [1-methyl-2- [[2- (4-nitrophenoxy)-2-
oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-
triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer
with N,N,N',N',N'',N''-hexakis[2-aminoethyl]-1,3,5-
benzenetricarboxamide hydrobromide and [2-oxo-2-[4,7,10-tris[1-oxo-5-
[[[(phenylmethoxy)carbonyl]amino]-2-[3-[[[(phenylmethoxy)carbonyl]amino]pr
opyl]pentyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI)
(CA INDEX NAME)

CM 1

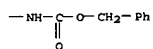
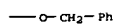
CRN 192636-23-0
CMF C84 H108 N10 O19

PAGE 1-A



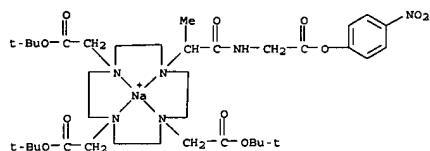
L23 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-B



CM 2

CRN 192636-00-3
 CMF C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

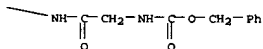
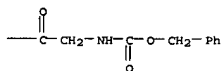
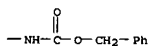
● Br⁻

CM 3

CRN 192635-87-3
 CMF C21 H39 N9 O3 . x Br H

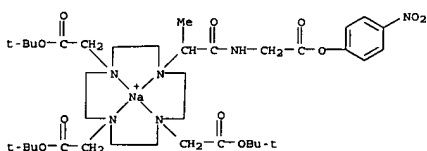
L23 ANSWER 11 OF 12 USPATFULL (Continued)

PAGE 1-B



CM 2

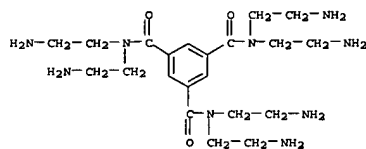
CRN 192636-00-3
 CMF C37 H60 N6 Na O11 . Br
 CCI CCS
 CDES 7:T-4

● Br⁻

CM 3

CRN 192635-87-3
 CMF C21 H39 N9 O3 . x Br H

L23 ANSWER 11 OF 12 USPATFULL (Continued)



● x HBr

RN 192636-31-0 USPATFULL

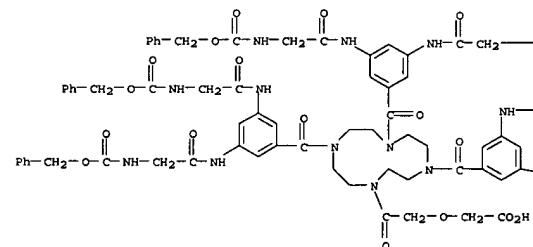
CN Sodium(1+), [tris(1,1-dimethylethyl)

10-[1-methyl-2-[[2-(4-nitrophenoxy)-2-oxoethyl]amino]-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, polymer with
 N,N,N',N',N'',N''-hexakis(2-aminoethyl)-1,3,5-benzenetricarboxamide hydrobromide and
 [2-oxo-2-[4,7,10-tris[3,5-bis[[[(phenylmethoxy)carbonyl]amino]acetyl]aminobenzoyl]-1,4,7,10-tetraazacyclododec-1-yl]ethoxy]acetic acid (9CI) (CA INDEX NAME)

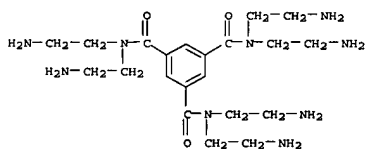
CM 1

CRN 192636-29-6
 CMF C93 H96 N16 O25

PAGE 1-A



L23 ANSWER 11 OF 12 USPATFULL (Continued)



● x HBr

L23 ANSWER 12 OF 12 USPATFULL
 ACCESSION NUMBER: 1998:124183 USPATFULL
 TITLE: Cascade polymer complexes, process for their
 production
 INVENTOR(S): and pharmaceutical agents containing said complexes
 Schmitt-Willich, Heribert, Berlin, Germany, Federal
 Republic of
 Platzek, Johannes, Berlin, Germany, Federal Republic
 of
 Raduchel, Bernd, Berlin, Germany, Federal Republic of
 Muhler, Andreas, Neuenhagen, Germany, Federal Republic
 of
 Frenzel, Thomas, Berlin, Germany, Federal Republic of
 Schering Aktiengesellschaft, Berlin, Germany, Federal
 Republic of (non-U.S. corporation)
 PATENT ASSIGNEE(S):
 NUMBER KIND DATE
 PATENT INFORMATION: US 5820849 19981013
 APPLICATION INFO.: US 1996-674844 19960703 (8)
 NUMBER DATE
 PRIORITY INFORMATION: DE 1995-19525924 19950704
 DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Hollinden, Gary E.
 ASSISTANT EXAMINER: Hartley, Michael G.
 LEGAL REPRESENTATIVE: Millen, White, Zelano & Branigan, P.C.
 NUMBER OF CLAIMS: 14
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
 LINE COUNT: 2077
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Cascade polymer complexes that contain

a) complexing ligands of general formula I

A-[X-[Y-(Z-<W-K.sub.W>.sub.Z).sub.Y].sub.X].sub.A (I),

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity a,

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

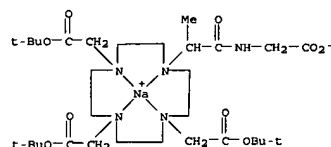
Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w,

K stands for the radical of a complexing agent,

a stands for numbers 2 to 12,

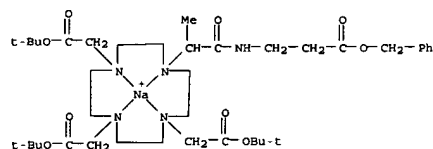
x, y, z and w, independently of one another, stand for numbers 1 to 4,

L23 ANSWER 12 OF 12 USPATFULL (Continued)



● HBr

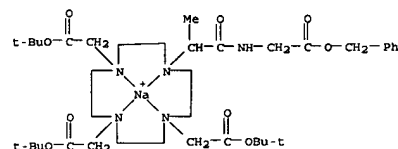
RN 186095-30-7 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[(3-oxo-3-(phenylmethoxy)propyl)amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)



● Br⁻

RN 186095-31-8 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

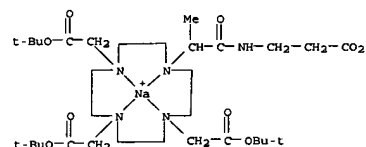
L23 ANSWER 12 OF 12 USPATFULL (Continued)
 provided that at least two reproduction units are different and that
 for the product of the multiplicities,
 $16 \leq a \cdot \text{multidot} \cdot x \cdot \text{multidot} \cdot y \cdot \text{multidot} \cdot z \cdot \text{multidot} \cdot w \leq 64$
 holds true.
 b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42,
 or 57-83,
 c) optionally cations of inorganic and/or organic bases, amino acids or amino acid amides as well as
 d) optionally acylated terminal amino groups
 are valuable compounds for diagnosis and therapy.
 IT 186095-26-1P 186095-27-2P 186095-30-7P
 186095-31-8P 186095-35-2P 186095-36-3P
 (prepn. of cascade polymer complexes as medical contrast media)
 RN 186095-26-1 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[1-methyl-2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl)amino]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)



● Br⁻

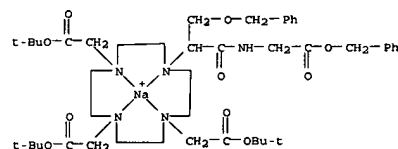
RN 186095-27-2 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-methyl-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

L23 ANSWER 12 OF 12 USPATFULL (Continued)



● HBr

RN 186095-35-2 USPATFULL
 CN Sodium(1+), [tris(1,1-dimethylethyl) 10-[2-oxo-2-[(2-oxo-2-(phenylmethoxy)ethyl)amino]-1-[(phenylmethoxy)methyl]ethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, bromide, (T-4)-(9CI) (CA INDEX NAME)



● Br⁻

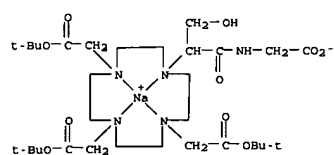
RN 186095-36-3 USPATFULL
 CN Sodium, [1,4,7-tris(1,1-dimethylethyl) 10-[2-[(carboxymethyl)amino]-1-(hydroxymethyl)-2-oxoethyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetate-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]-, monohydrobromide, (T-4)-(9CI) (CA INDEX NAME)

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Page 55

L23 ANSWER 12 OF 12 USPTAFULL (Continued)



● HBr